Parent run Science Club
Nooitgedacht 88 Primary School

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Major Objective

...facilitate national economic and social improvement through human capital development...
Nooitgedacht 88 Primary School

Founded 1905
Nooitgedacht 88 Primary School

- Founded 1905
- 30 kms north of Joburg
Nooitgedacht 88 Primary School

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- English/Afrikaans parallel medium
Nooitgedacht 88 Primary School

- 97.5% ethnic Africans
Nooitgedacht 88 Primary School

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- From informal settlements
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- Walk or come by taxi
Nooitgedacht 88 Primary School

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- 2007 “non-paying” English medium school
The problem

First term, 2006, Grade 6 Natural Science class average was 38%
If you aren't part of the solution, then you are part of the problem.
Parent Run Science Club

- Free of charge
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- Free of charge
- Relaxed, non-disciplinarian environment
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- Free of charge
- Relaxed, non-disciplinarian environment
- Shadow the Grade 6 science curriculum
Parent Run Science Club

- Free of charge
- Relaxed, non-disciplinarian environment
- Shadow the Grade 6 science curriculum
- Lots of fun
Free of charge

- No cost to the learners
- Kept costs below R50.00 per week total (US$7.50)
- Used “second hand junk”
- Film canisters
- Disposable flash cameras
- Cardboard boxes
- Plastic cool drink bottle
Relaxed, non-disciplinarian environment

- Outside
- Sat on the grass
- No desks
- Noise could dissipate
- Learners could “wiggle”
Shadowed the Grade 6 Science Class

- Planets
- Astronomy
- Energy
- Electricity and electronics
- Structures
- Water
- Soil
Lots of Fun
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- “Eye popper” or “Attention Grabber”
Lots of Fun

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- “Steam release” active game
Lots of Fun

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- Music-Dance
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- Card games
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- Board games
- Card games
- Build or make something
Lots of Fun

- “Eye popper” or “Attention Grabber”
- “Steam release” active game
- Music-Dance
- Board games
- Card games
- Build or make something
- Puzzle
“Eye Popper” and “Attention Getter”

* Coke and Mentos
“Eye Popper” and “Attention Getter”

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- Potassium Permanganate and Glycerine
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“Eye Popper” and “Attention Getter”

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“Steam Release” active games

- Relay races
- North-South-East-West
- Smugglers/Tag
“Steam Release” active games

- Relay races
- North-South-East-West
- Smugglers/Tag
Music - songs

Twinkle, twinkle, little star,
Now I know just what you are.
You're a flaming nuclear mass,
Made of Hydrogen and Helium gas.
Twinkle, twinkle, little star,
Now I know just what you are.
Music – lipsync “rock” performance

- “Sound travels in waves”
- Performed for the entire school at assembly
Board games - Energy
Board games – Marshmallow Magic
Board games – Storm water
Card games

- “Concentration” or “memory”
- “Go fish”
- “Kim's” games
- Rummy
Card games

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Card games

- “Concentration” or “memory”
- “Go fish”
- “Kim's” games
- Rummy
Make things – syphon
Make things – water filter
Puzzles

Across | Down
--- | ---
2. | 1.
3. | 2.
5. | 3.
6. | 4.
7. | 5.
8. | 6.
9. | 7.
10. | 8.
11. | 9.

11.
Puzzles

<table>
<thead>
<tr>
<th>Mercury</th>
<th>Venus</th>
<th>Earth</th>
<th>Mars</th>
<th>Jupiter</th>
<th>Saturn</th>
<th>Uranus</th>
<th>Neptune</th>
<th>Pluto</th>
</tr>
</thead>
</table>

Planet Sudoku

[Image of a Sudoku puzzle with images of planets filling the cells, respecting the given constraints.]
Feedback from learners

How do you feel today?

Show me if you enjoyed the lesson
Results

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Results

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- Highest mark in grade level went from 61% to 96%
- “The Grade 6 learners involved in the Science Club [are] already participating in the total discipline within their respective classes.” - Facilitator Natural Science
- “Student’s overall attitude has improved in terms of preparation before tests and exams.” - Facilitator Natural Science
Learners Attending Science Club Regularly

- First term ave 42%
- Second term ave 63%
- Third term ave 60%
What next?

- Involve more parents
- “New” Grade 7s want to help next year’s Grade 6s
- Start a collaborative “group”
  http://groups.yahoo.com/group/science_club_ideas
Summary

- Parents positively influence science marks
- Parents don't need a science education to help improve the science marks
- Low cost
- Learners will help make it sustainable
Thank you

- GoogleEarth aerial images of Nooitgedacht Primary
- Potassium Permanganate and glycerine images from Journal of Chemical Education website
- “Sound Travels in Waves” from http://www.sciencejam.com