Kenyatta University Primary School, Time Travel

Goal
- Introduce methods of teaching Mathematics in the historic environment
- Relational understanding of measurement in the historical environment

Facts
In 1965 Kenyatta College opened, two years after independence, on the grounds that had been used for military barracks by the British army, the Templar Barracks. The focus in the college was on secondary school education and training of teachers.
Kenyatta College grew a lot in the 1970s. In 1978 Faculty of Education of University of Nairobi was transferred to KUC and KUC became the leading institution for teacher education and training of teachers in the country. New houses were built on campus and the staff grew extensively. Most of the increasing staff stayed on campus with their families.
There was a need for a primary school and in 1978 Kenyatta University College Primary School opened as a school for the children of the staff at KUC.
In August 1985 the University College was changed into a full university and became Kenyatta University. The name of the school subsequently changed to Kenyatta University Primary School.
From the beginning the school was quite small with small classes. There was a desire to have a high quality in education.
Every school was inspected now and then from the national educational authorities. The school inspectors checked if the education was on an adequate level, the books in order and that the curriculum was followed. The schools seldom knew when the inspector(s) were coming.

Scenario, School Inspection 1980
KUC Primary School opened only two years ago and has big ambitions to be a school of excellence and promote quality education in a child friendly environment.

Today there is a rumour that the school is going to be inspected by national and/ or local inspectors. The inspectors seldom give notice in advance, so nobody really knows if they are coming today or another day. And will it be inspection of the whole school or in just one or two subjects? Will there be one inspector or a panel? When they come the inspectors want to check the documents and observe lessons. They can ask questions in the classroom, to understand the teaching situation. They often interview both teachers and pupils to get a full picture of the school. Before they leave, at the end of the day, they will give an oral report and summarize their experiences. A few weeks later the written report will reach the school.
A school inspection is quite nervous for the teachers and the head of the school. What will they say? This is decisive for the future of the school.

The teachers have lessons as always but of course they are well prepared. They want to do a good impression if there will be an inspection.

One of the classes is outside to have a lesson in the school yard in Mathematics, more specific on measurements. This is an alternative way of teaching compared to the classroom. Probably the inspector is quite curious in this way of teaching. Will he/ she find it a good way of teaching and learning?

The teachers start the lesson as planned and the pupils are divided into different activities. Nobody knows if there will be an inspection or not. It is best to be prepared…

Roles
The pupils are the pupils, grade six, in 1980
The adults are the teachers and assistants at school in 1980
School inspector

Key Questions
Quality of education
- How and when do I learn in best? Understanding, quality of education (listening, reading, doing, problem solving; in the classroom, outside; at school, at home; relevant themes, motivation, etc)
- In what way is this learning relevant for me? When can I use it?

Problem-solving activities
- Bonds of friendship, problem solving, togetherness
- Number line, distance
- Songs and movement, measurement units
- Water measurement, volume
- Body measurement, length
- Tree measurement, height
- Using meter cord, estimation of length and circumference
- Fence, circumference, area

Time Plan
14.00 The participants gather in the school yard
  Welcome, scenario, rules
14.15 Initiation
  Activities start
15.10 School inspector arrives, education
15.30 Time Travel ends
  Evaluation
16.00 End

5 February 2014
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Aktiviteter tidsresa Kenyatta university primary school

Aktivitet 1

Tallinje

Uppgift:

A. Eleverna väljer två träd med avståndet 5 meter. Fäst en lina mellan träden med höjden 1.75.

   Hur lång lina behövs? Tänk på omkretsen av trädet etc. Mät med stöd av metersnöre.

B. En skapad tallinje: Placera ut 0, 10. Sätt ut 5 etc. Variera tallinjen. Ex 45 – 105. Mellan 0-10, decimaltal
   Samtala om sträckor och jämna avstånd. Om tallinjen är 0-10. Visa då var 15 skulle komma mm.

Aktivitet 2

Vänskapsband

Uppgift:

Hur många band behövs för att alla ska ha samhörighet med varandra?

Plastband, gärna i olika färger.

Hur många band om alla i klassen ska förbindas?

Hur många meter band?

Ställa sig i en cirkel – vad utmärker den? Hur gör vi en korrekt cirkel

Aktivitet 3

Sång och rörelse, rap

Uppgift:

Du ska visa förståelse för mm, cm, dm, m

Visa tabell, tiosystem

Aktivitet 4

Uppgift:

A. Hur mycket vatten använder du på en dag? Uppskatta! Dricka, tvätta händerna.

B. Olika flaskor fylls med olika mängder vatten. Bowla – försök komma till en liter.

Flaskorna är märkta med mängden, exempelvis 25 ml, 2 dl etc. Markeras vid vattenytan med tuschpenna.

Material: Flaskor, Tuschpenna, boll eller sten, papper, penna,

Aktivitet 5

Uppgift:

A. Visa en meter med dig själv! Uppskatta först. Använd sedan metersnöre.
Exempelvis axel/utsträckt arm, till bröstet, steg,
B. Jämför olika kroppsdelar med varandra. Hitta samband.
Exempelvis längd/utsträckta armar, näsa/pekfinger, nederarm/fot
Kom in på gamla mått

Aktivitet 6

Uppgift:

Hur högt är trädet? Uppskatta. Hur kan jag mäta?

Använd a) skugga b)pinne c) en elev

Jämför resultat

Aktivitet 7

Använd metersnöret för att mäta omkretser av träd, Kan jag få ut 30 cm utan att använda linjal?

Pi.

Aktivitet 8

Uppskatta staketets längd. Jämföra omkrets/area förhålanden