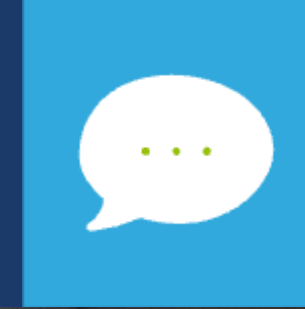




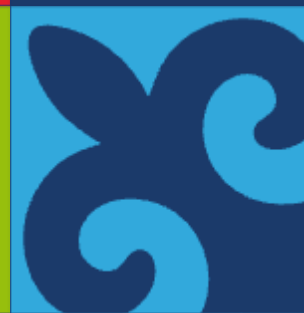
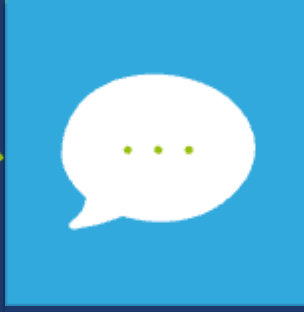
SCHOOLS 2030

# GLOBAL FORUM



# THE ROBOT TREE

AKOL RACHEAL, KOLOLO SENIOR SECONDARY SCHOOL



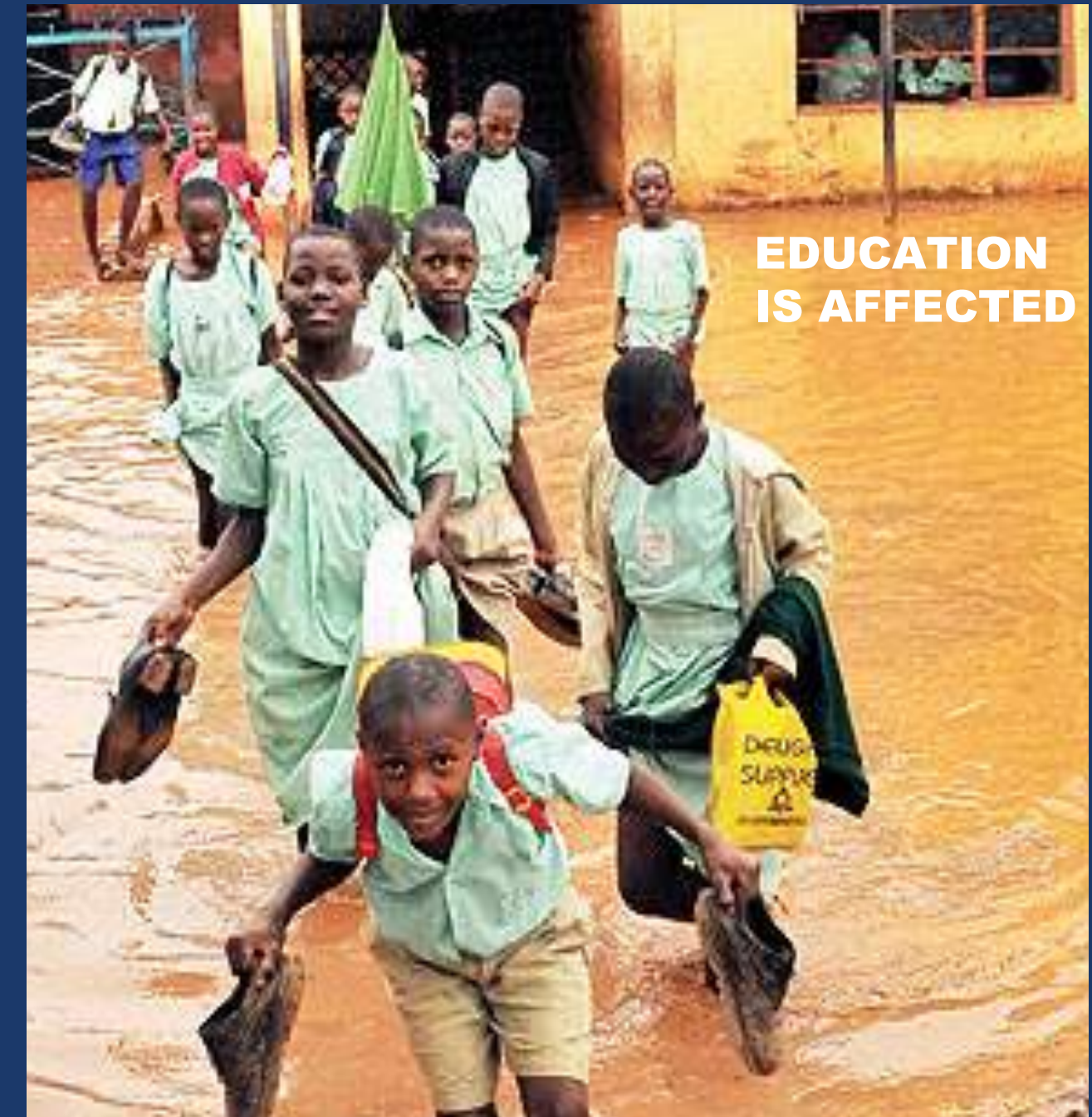
## TEACHER LEADERSHIP FOR CLIMATE RESILIENCE

How to Transform Learning through School and System Pathways for the Future of the Planet



# Context

- Uganda is the pearl of Africa, multi-lingual, full of culture and beautiful sceneries.
- Kololo Secondary School is a day-government-aided school in slum areas in the capital city Kampala
- Over five thousand students with an average of eighty students in a class.
- Flooding in rainy season, which is getting worse due to climate change
- In the dry season temperatures are increasingly hot which makes learning difficult



# The Challenge

## Classroom experience

- Learning levels are low in academic subjects, especially in language and literacy
- Holistic skills like collaboration and problem solving are important for student success but are not part of the classroom practice
- The high number of students in the classroom makes it hard for the teacher to provide feedback and support those who cannot complete their work

## Learners' experience

- The learners feel disengaged and bored working individually without much support from teacher
- Students are interested in issues of climate change and the environment but do not feel empowered to learn more or act



# Why the Robot Tree?

A Robot tree is a tree designed using plastic bottles and is used to teach literacy in Secondary school to encourage peer-to-peer learning and collaborative learning as a way of addressing low engagement levels and large classroom sizes.

## Teaching method

- Before the robot tree, it would take me longer to explain a lesson and most learners were disinterested, but with the robot tree, learners come up with their responses in groups and they excitedly come up to share their responses and my work is to facilitate and harmonize. They are collaborating and learning together rather than separately, and this improves their comprehension as well as their engagement

## Impact of the innovation on climate awareness

- The robot tree innovated from bottles that would have blocked the runways and caused floods are repurposed/recycled to solve the likely climatic disaster.
- The mere fact that the color green is used, communicates directly that there's need to preserve and conserve the environment.



# Response from Students

## Kevin

*I did not think that such a brilliant idea would come up from waste like plastic bottles. Learning has become fun and I always carry plastic bottles from the road to school to support teachers make more teaching aids.*

## Phoebe

*When we are using the tree, it makes all the group members active and each group would wish to come up with the best work to present on the robot tree*

## Observations

The students have come to realize that they can learn better when different methods in teaching are used. They have come to realize that they can also play part in solving climate related problems.



# Evidence of Impact

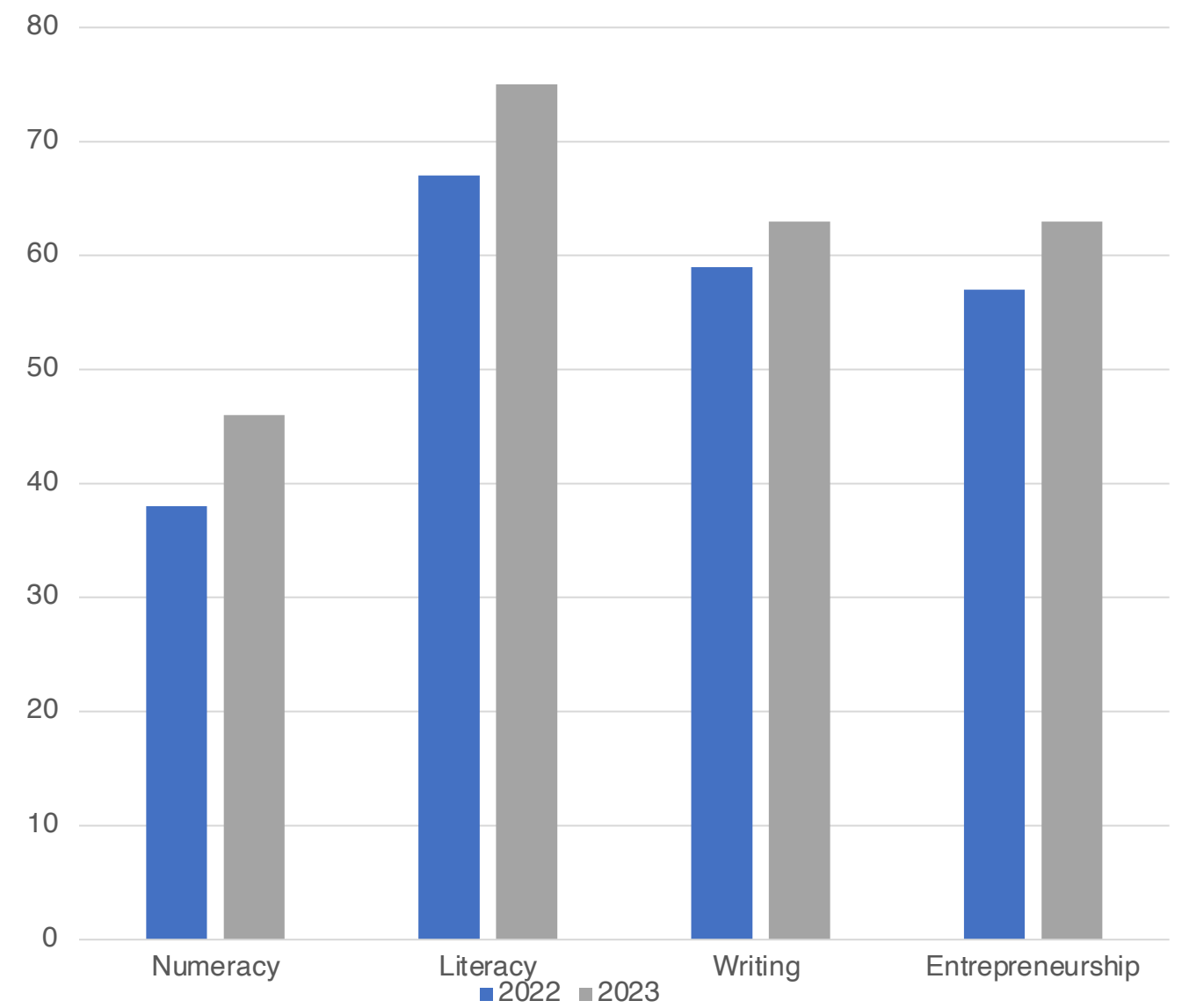
## Improved Learning

- Students achieving higher results across all subjects
- Learners are more motivated and are showing more responsibility and creativity in their lessons, especially around discussions about climate change and environmental protection

## Lessons Learned

- I have realized that students learn better when they collaborate and are engaged creatively to think for themselves
- Students realize that they can also play a part in solving climate-related problems and they like the opportunity to address common problems together with their peers

Average assessment scores of students, Kololo Senior Secondary School





**THANK YOU!**



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