

Empowering Students with Sugar

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4y olds at Providence Basic



OLPC XO-1.75, 2011



- 800MHz ARM Sheeva
- 1200x900 LCD
- 256MB RAM
- 4GB to 8GB flash disk
- 802.11s mesh wifi
- 640x480 camera
- Protected keyboard
- Optional touch screen
- Low-power operation



2007 4 10

3G broadband, Paraguay & Uruguay



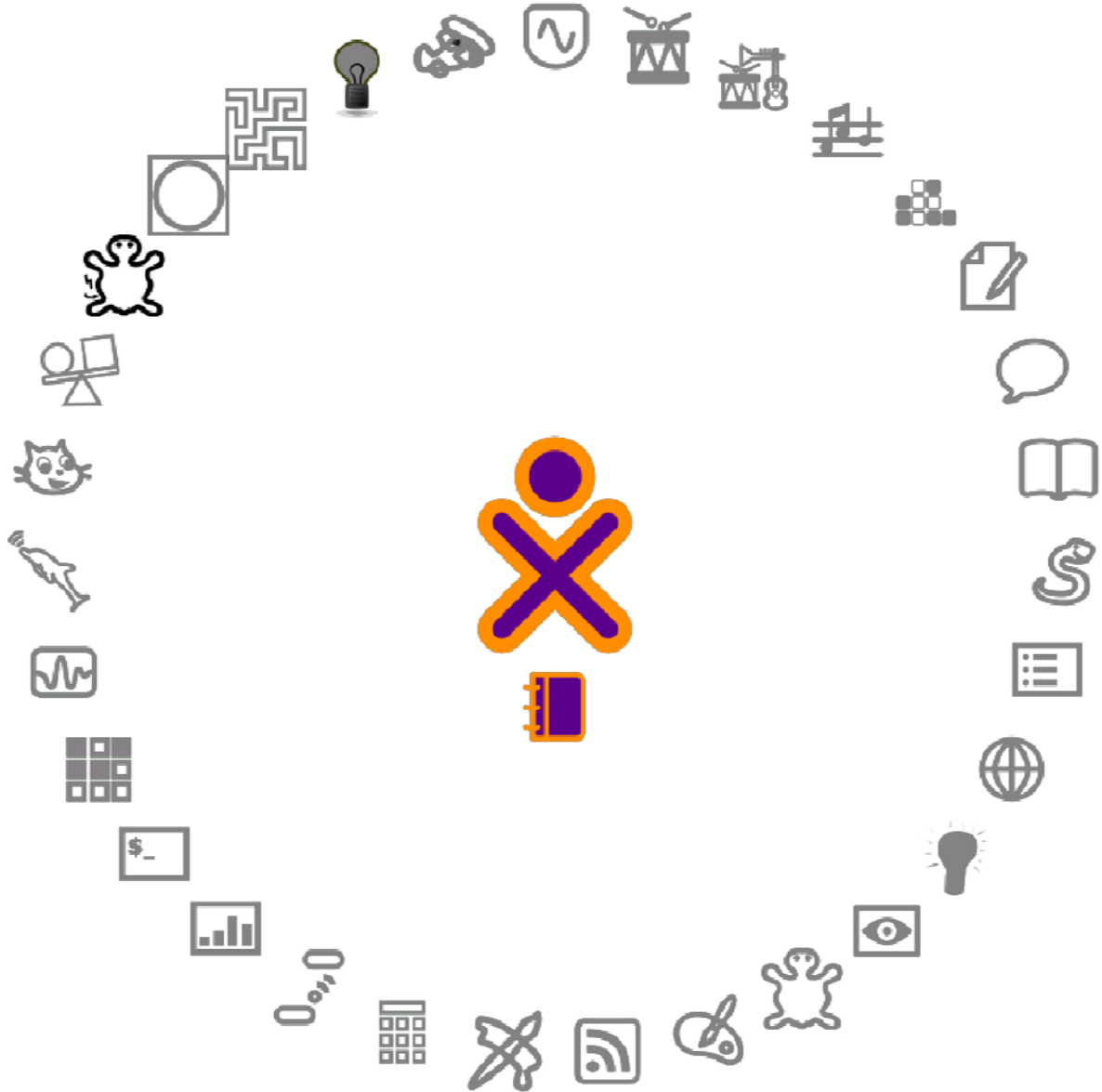
**Sugar reinvents the use of
computers in education.**

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Sugar's pedagogical base

- John Dewey
- Jean Piaget
- Paulo Freire
- Seymour Papert
- Lev Vygotsky
- Alan Kay
- Walter Bender





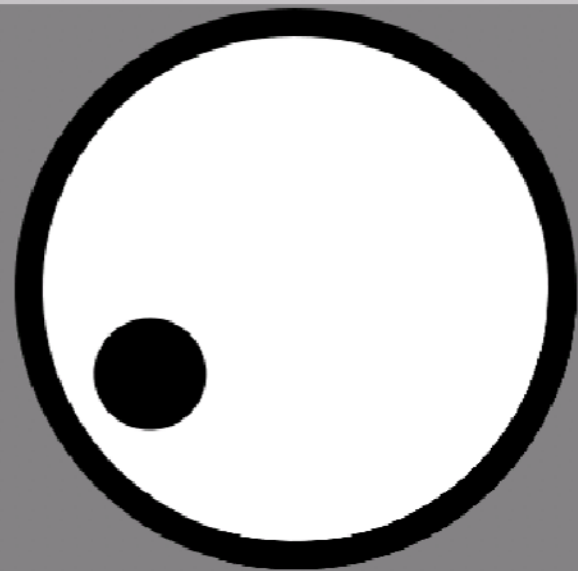
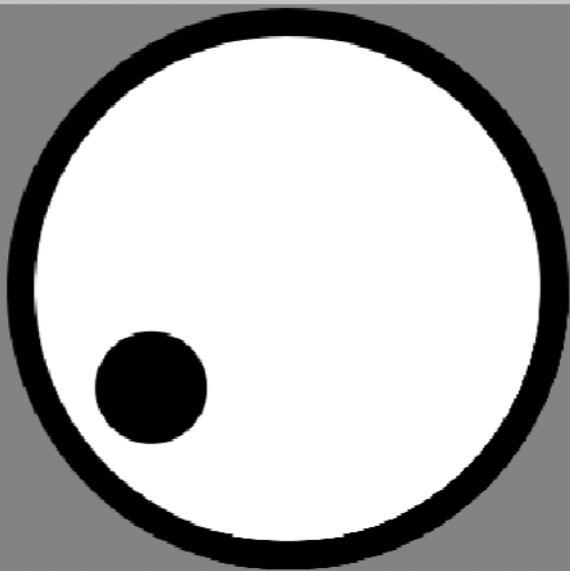
Icelandic



Activity

Voice

Face



Hello everyone!



100

%



page:

1



Format

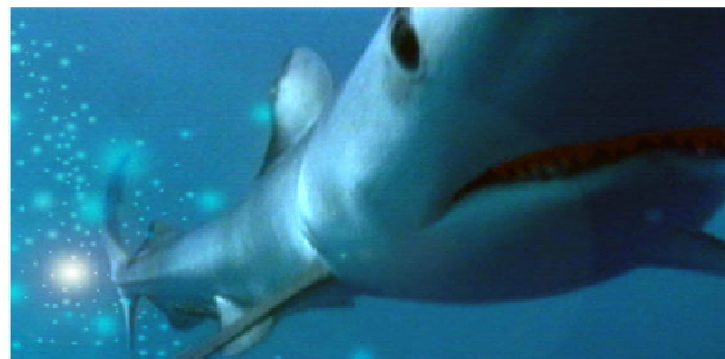
View



Sharks

by Nittaya, Jaruwan, Yupin, Viroj

In some form, sharks have been around for about 400 million years. Even before dinosaurs roamed the earth, sharks hunted through the oceans! They're such good survivors that they've had little need to evolve in the last 150 million years. These ancient predators fascinate adults and children alike. Sharks have the most powerful jaws on the planet. Unlike most animals' jaws, both the sharks' upper and lower jaws move.



A shark bites with its lower jaw first and then its upper. It tosses its head back and forth to tear loose a piece of meat which it swallows whole. Each type of shark has a different shaped tooth depending on their diet. (The shark in the photo is a great white—you can tell he's a carnivore just by looking at those sharp, pointy teeth!)

A shark may grow and use over 20,000 teeth in its lifetime! Sharks never run out of teeth. If one is lost, another spins forward from the rows and rows of backup teeth. Normally, sharks eat alone. But sometimes one feeding shark attracts others. They swim up as quickly as possible and all begin to try to get a piece of the prey. They bite wildly at anything that gets in their way—even each other.

The great white shark rarely partakes in feeding frenzies. Almost all sharks are “carnivores” or meat eaters. They live on a diet of fish and sea mammals (like dolphins and seals) and even such prey as turtles and seagulls. Sharks even eat other sharks. For example, a tiger shark might eat a bull shark, a bull shark might eat a blacktip shark and a blacktip shark might eat a dogfish shark!

IDB report

“Technology and Child Development:
Evidence from the OLPC Program”

- Published in Feb 2012
- Large-scale randomized evaluation
- 15 months of implementation
- 319 primary schools in rural Peru

improvements in cognitive skills

“students in the treatment group surpass students in the control group by between 0.09 and 0.13 standard deviations”

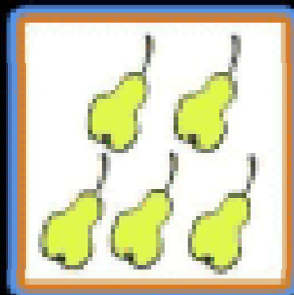
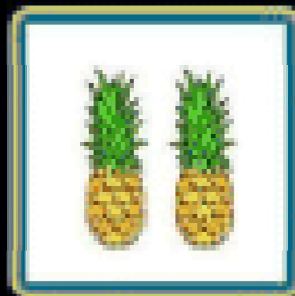
“verbal fluency measure represents the progression expected in 6 months for a child”



Muriel L.



Muriel



Technology in education today

- .Constructionist learning made easy
- .2 millions of students are using Sugar today
- .Free and open to everyone

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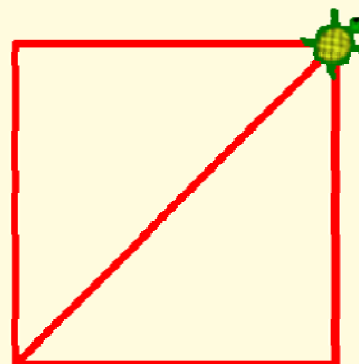


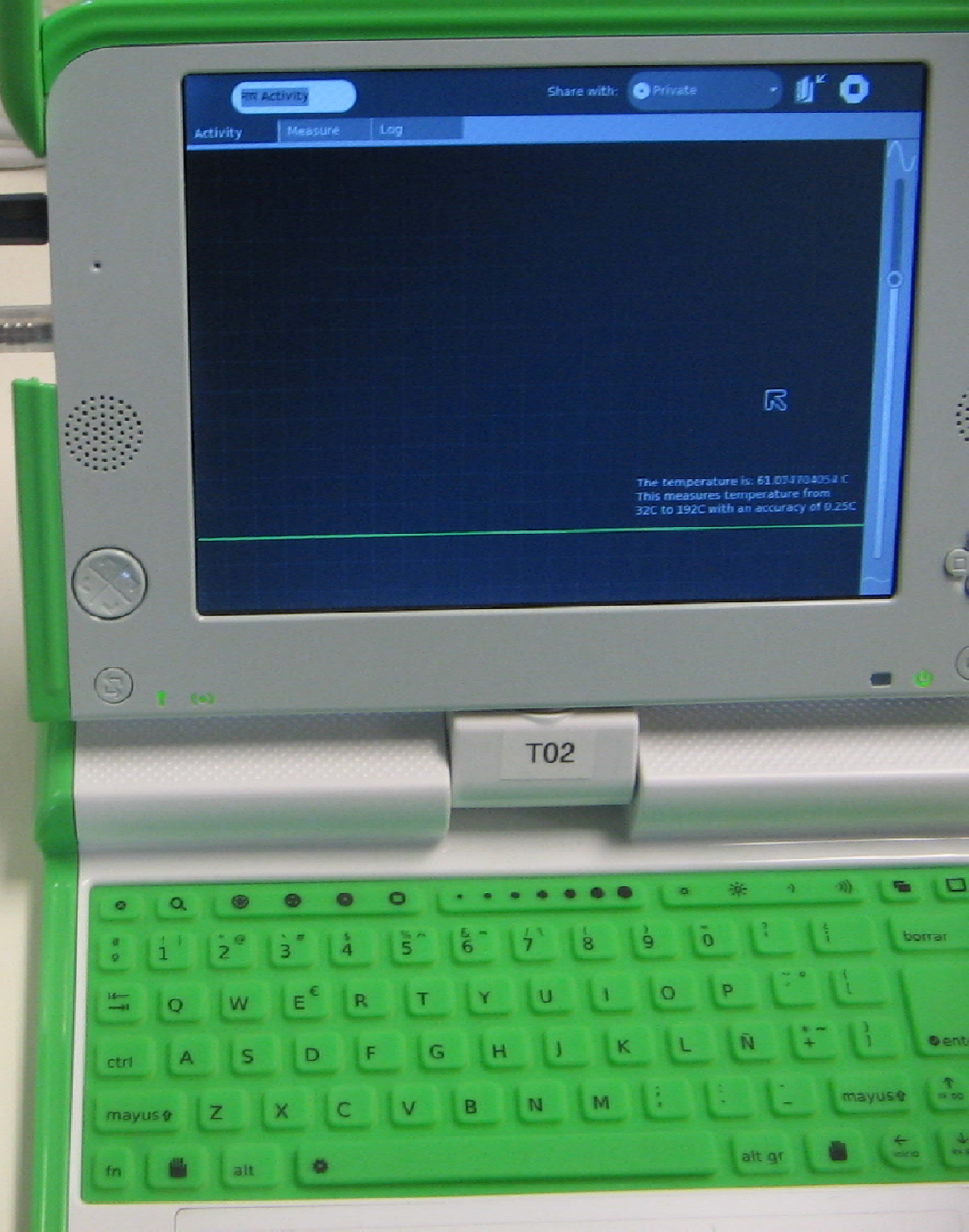
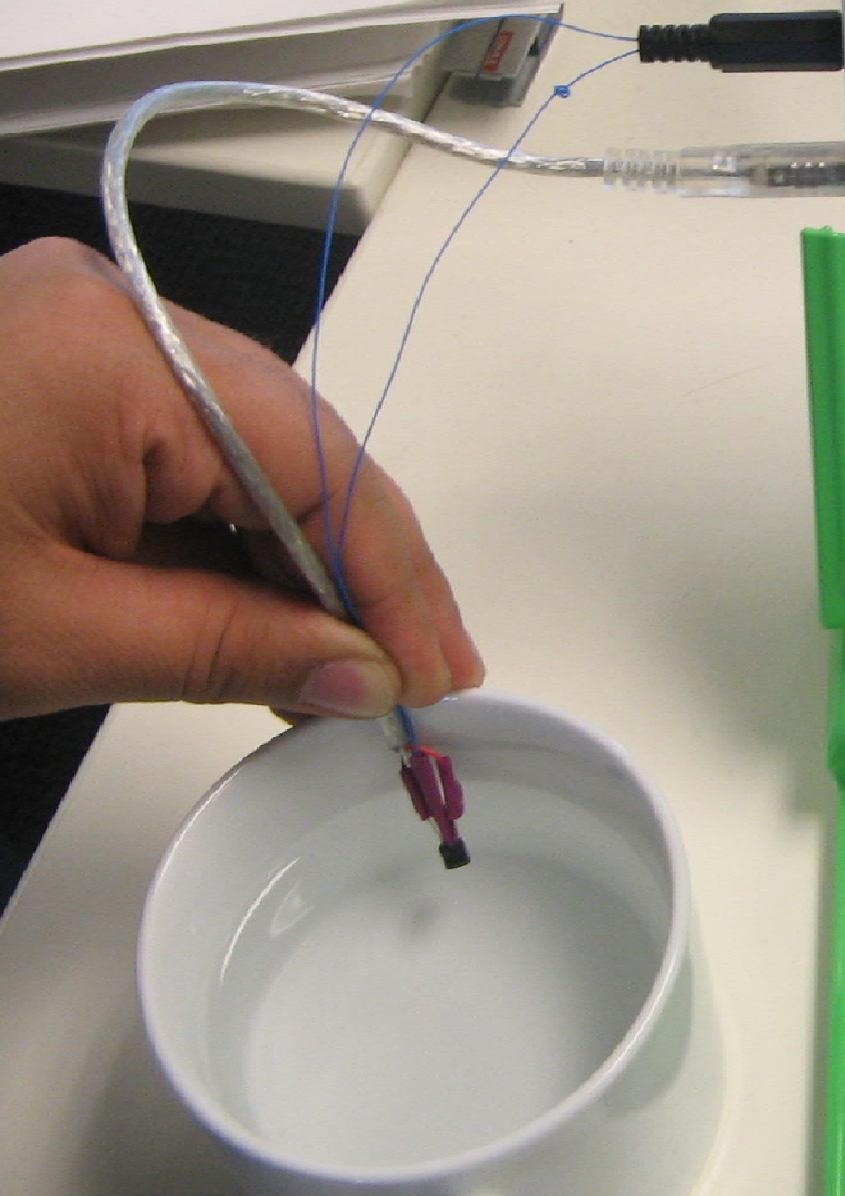
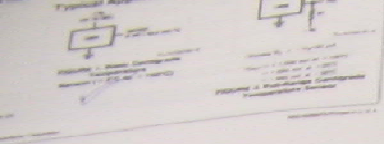
Numbers

number



```
store in box1 200
repeat 4
  forward box1
  right 90
store in box1 box1 * box1
right 45
forward sqrt(box1 + box1)
```





OLPC in Jamaica

- Providence Methodist Basic School
- 70 laptops in the hands of 4 and 5 year olds
- Results: 50% improvement in scores

OLPC in Jamaica

- August Town Primary
- 35 laptops for 70 grade 4 children
- Improvement in scores from 47% to 61%

Los Scratcheros



5yo explains Pippy



Who is creating Sugar?

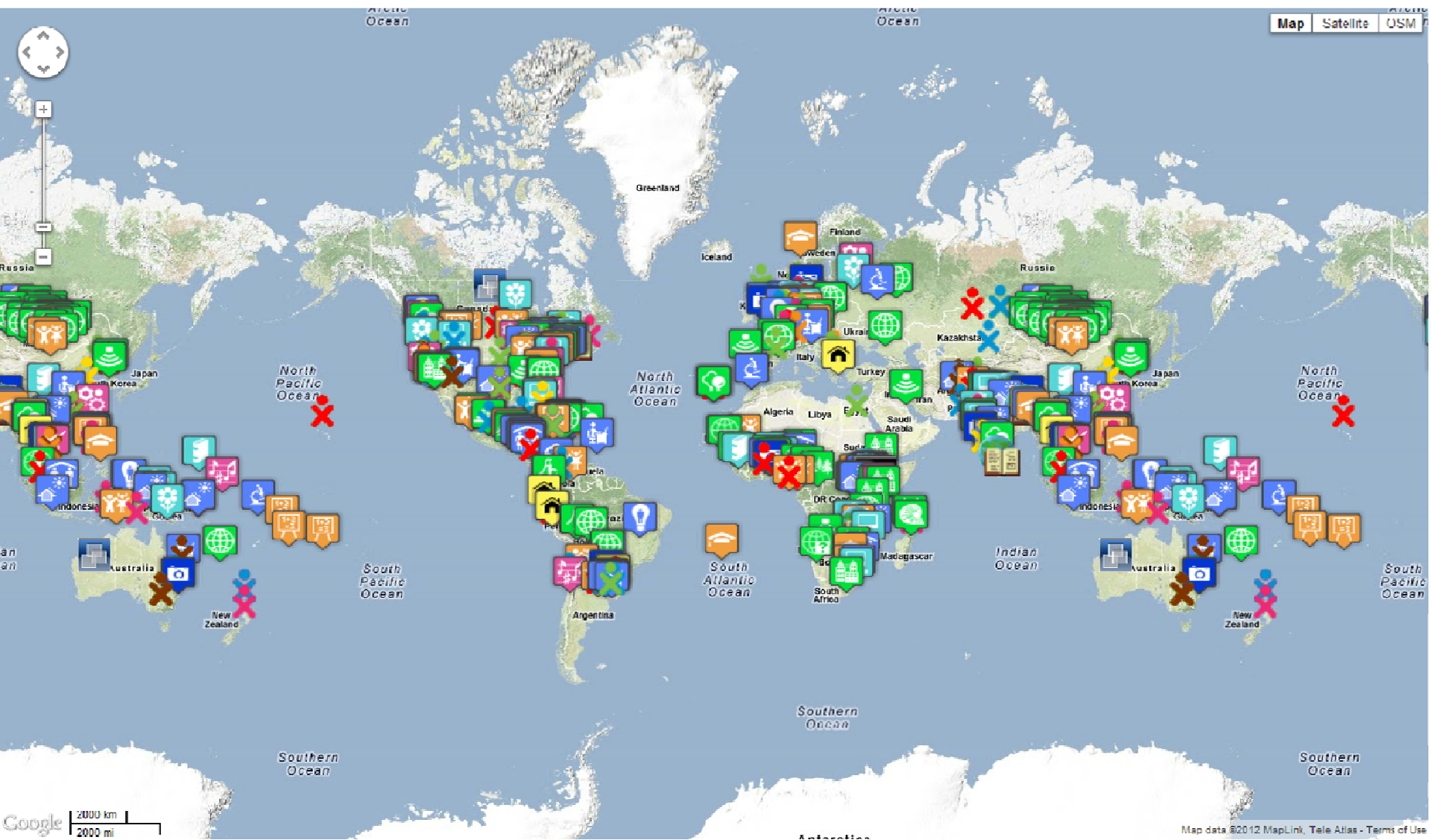
- Large community of world-wide volunteers:

Germany, India, Italy, Nepal, Portugal, Paraguay,

Peru, Russia, Uruguay, UK, USA, ...

- OLPC's engineering team
- Local engineering teams

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Engaging grade 5 students





School Computer Clubs

Laptop repairs



Together: teachers and technologists

- Haiti's weekly lesson planning sessions
- OLPC Teacher Corps
- Developmental Officers and Education Officers leading zone/cluster training

Deployment Guide

- Developmental & Education Officers
- Principals
- Teachers
- Parents
- 4 year olds, 6 year olds

