Get Involved!

Presented by Caryl Bigenho
OLPC Support Volunteer and Sugarlabs Facilitator
Bozeman Linux Users Group, MSU, MT
June 25, 2009
START A PROJECT THAT WILL CHANGE KIDS' LIVES WORLDWIDE!

http://wiki.laptop.org/go/Contributors_program
Meet The XO

Some Prototypes

Today’s XO

The Future?
Sugar Software
Origins At MIT

• Seymour Papert

Remember LOGO?  1967

Educational Best Seller 1980-present
'The best way to predict the future is to invent it' - Alan Kay.

Dynabook 1968

Smalltalk for Children 1973

Alan Kay
MIT Media Lab

Nicolas Negroponte  Mary Lou Jepson  Walter Bender
Deployments Around The World

- green – pilot schools
- orange – G1G1 supported deployments
- purple – country deployments
- blue - Give Many deployments
Project Ceibal Uruguay
202,000+ laptops
GIGI Partner Mongolia
A Privately Funded XO Deployment in the Caribbean Area

Immokalee, FL

Nicaragua

Haiti

St. Vincent

St. John, VI
Some Other Deployments

Afghanistan
(GIGI Partner Country)

Nepal
(Grassroots Deployment)

Ethiopia
(GIGI Partner Country)

Ghana
(GIGI Partner Country)
Run Sugar On The Computers You Already Have!

“Live” CD  “SoaS”: Sugar On A Stick

Virtual Box for MacBooks
137+ Activities!

- General Search & Discovery (5)
- Documents (Read, Write, & Share) (7)
- Feeds: News & more (1)
- Chat, Mail, & Talk (4)
- Drawing & Media creation/editing (14)
- Programming (13)
- Math & Science (18)
- Maps and Geography (4)
- Media, Audio & Video Players (3)
- Games (47)
- Teacher and New User Tools (5)
- Other (16)
- (Counts as of Feb 2009)

http://wiki.laptop.org/go/Activities/All
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 it’s 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 smaller, smaller fish, which in turn might be eaten by a large, large, large fish. Sharks live in the...
Record Activity

OLPC Thailand

9-months-old

9-years-old

90-years-old
Programming for Kids
(Adults can Play Too!)

- Turtle Art
- EToys
- Scratch
- Pippy
- Terminal
Measure Activity

Oscilloscope

Electronic Tuning “Fork”

Temperature Sensor

Temperature Turtle Art
START A PROJECT THAT WILL CHANGE KIDS' LIVES WORLDWIDE!

http://wiki.laptop.org/go/Contributors_program
How To Contribute

- People Person
- Educator
- Translator
- Developer
- Designer
- Content Writer
Suggest New Educational Activities
Test new Activities
Provide Feedback for Software Developers
Write Teacher Guides
Design Lesson Plans Using Sugar Activities
Help Set Educational Goals
Start new Campus Chapters
Translators

• Translate and “Localize” Activities
• Translate FLOSS Manuals
• Translate wiki Pages With the “Wiki Team”
• Translate Online Using Moodle/Pootle
• Most Languages Needed
• Sugar Art Work
• Activity Image Content
• User Interface Design
• Web Design
• Icons
• Design Mock-ups
Content Writer

- Write A FLOSS Manual For Your Favorite Activity
- Write Lesson Plans
- Write Wiki Pages
- Write How-tos
- Write FAQs
• Help/Support Team
• Conferences
• Press Releases
• Local Events
• Sugar Labs Forum
• Cat Herding
Developer

- Program in Python, C, GTK+
- File & Fix Bugs
- Design & Build Sugar & Sugar Activities
- Develop New Features
- Design New Peripherals
- “Sugarize” Existing Open-Source Programs
Cows and effect

Cows — and some creativity — drive a unique experiment launched by the One Laptop Per Child foundation

C Sujit Chandra Kumar
Mumbai

At Village Khairat in Raigad district, about 40 km east of Navi Mumbai, the scene seems surreal. Just outside a one-classroom school set amid a cluster of huts, a teacher and 22 children carrying colourful laptops are conducting a unique experiment that makes a bullock cart stop in its tracks.

What I see is a contraption that connects the two wheel-rims of a motorcycle to the dynamo of an old Fiat car. The rims are connected by a belt and they act as pulleys. They are in turn attached to a cow that goes round, making them revolve. The other end is connected to a laptop.

A cow-powered laptop? Bizarre as that sounds, it is not hard to see why it works here, in village Khairat, where every household has a few cows and the villagers, who belong to a nomadic tribe, sell milk for a living. The idea came from Arjun Sarwal, a student of the Delhi Institute of Technology and volunteer with the One Laptop Per Child (OLPC) foundation. “In these remote villages, there is often no power for up to seven hours a day because of load-shedding. Solar panels are not cheap and generators have recurring costs. So we thought of this alternative source of energy. With one cow, we

VILLAGE ON THE MOVE: The cow power experiment involves a cow which drives a dynamo that powers the laptop; (below) Sandeep Surve, the teacher, explains a concept to his students with the help of the XO laptops.
The SpikerBox: Bringing Neurophysiology to Everyone

Recorded Cockroach Neural Signals Using SpikerBox, Microphone Input on Laptop, and Free Audio Software

Air puffs on leg barbs

4 seconds Neural Recording Trace

Zoomed in 100 ms of individual Compound Action Potentials

Greg Gage & Tim Marzullo
U of Michigan Department of Biomedical Engineering
BioSensor

A low cost sensor for sensing pathogens and contaminants in food, water and soil.

Paola Lira, Lima Peru
Apply now for XO-1.5 Boards

OLPC XO-1.5
A1 Prototype

DCon
Hynix HX8837

Companion Chip
Via VX855

Processor
Via 7C-M ULV 0.4 - 1.0 GHz

WLAN
Marvell 8886 SDIO connect

HD Audio Codec

RAM
DDR2 SDRAM 128 MBytes each

+2.8V Pwr Sup.

+1.8V Mem. Pwr Supply

SD/MMC Slot

VCORE Power Supply

+1.2V Power Supply

+1.05V Power Supply

Clock Synth ICS9UM702

3VPCU Power Supply

LCD Power Supply

Solid State Disk
4+ GB Flash

Backlight Power Supply

+5V Supply

+3.3V Supply

Embedded Controller
ENE KB3700

Battery Charger
Fujitsu MB39A129
Start A Local SugarLab!

- Adapt Sugar technology and pedagogy to an area's culture and resources
- Support Sugar deployments in area schools
- Create a local community devoted to making Sugar more open and sustainable
- Provide communication between local & global Sugar Labs communities
- Develop Local content and software that can also be used by for the overall Sugar community
- Host or co-host conferences, workshops, talks and meetings related to the use or development of Sugar
Successful SugarLabs Might Have:

- A university connection as a local human resource
- A local pilot user group from which to learn
- A local passion or sub-goal that provides a rationale for the work
- Bi-directional communication with the global Sugar community and other Sugar Labs
- A sustainable and well-defined entrepreneurship model
- A program to reach out to local free-software community and local industry
Bring The World To Montana Rural Schools

• File project proposal with OLPC
• Identify possible school
• Get support of teachers, parents, community
• Train staff
• Distribute XOs
• Provide Support
• Evaluate
Contacts/Resources

help@laptop.org  caryl@laptop.org
http://wiki.sugarlabs.org/go/Welcome_to_the_Sugar_Labs_wiki
http://sugarlabs.org/go/Sugar_Labs/GettingInvolved
http://wiki.laptop.org/go/The OLPC Wiki
http://wiki.laptop.org/go/Participate
http://wiki.laptop.org/go/Contributors_Program
For More Info, Attend Free Virtual Sessions About Sugar and OLPC at NECC Unplugged

Mon 6/29
9:30-10 am MDT
1:30-2 pm MDT

Tues 6/30
9-9:30 am MDT
9:30-10 am MDT

Be sure to sign up and configure your computer ahead of time at:
www.elluminate.com/

http://www.neccunplugged.com/