## One Laptop per Child

Nicholas Negroponte Walter Bender Antonio Battro David Cavallo

8 November 2006



#### **Outline**

- Our mission
- How would one design a laptop for children?
- How will children use the laptop for learning?



# Our premise: Children lack opportunity, not capability

High-quality education for all is essential to provide a fair, equitable, economically and viable society; access to laptops on a sufficient scale provides real benefits for learning.











# How would one design a laptop for children?



## A child's laptop is:



- Safe and robust;
- Light to carry; vibrant to look at;
- Used outdoors (ready to go where they are);
- Low power;
- Helps them communicate and interact;
- Encourages them to express themselves;
- Lets them engage in open-ended discovery;
- And of course... inexpensive!



### Software features

- Web browser/server
- Word processing
- eBook reader
- Chat
- VOIP
- Email
- Journal
- Wiki

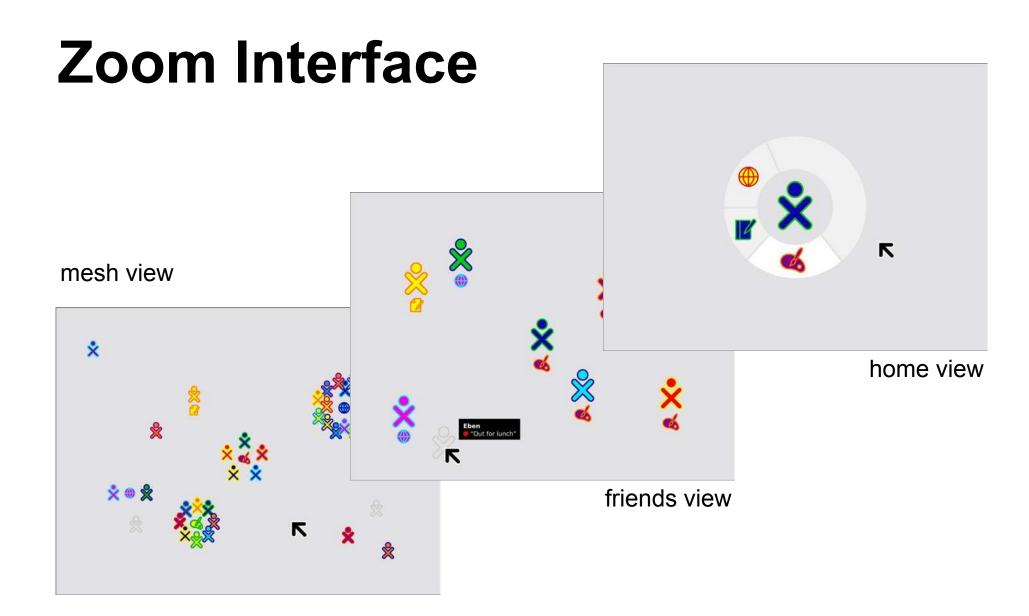
- Graphics
- Logo
- Etoys (Smalltalk)
- Multimedia play/record/stream
- Music synthesis/playback
- Games



# Appropriate to appropriate

Transparency is empowering. Open-source software gives children—and their teachers— the freedom to reshape, reinvent, and reapply their software, hardware, and content.







### **Collaborative Interface**



We leverage the mesh network to enable collaborative learning—the presence of children and teachers as collaborators and critiques is always present in the interface.

olpc

# **Security**

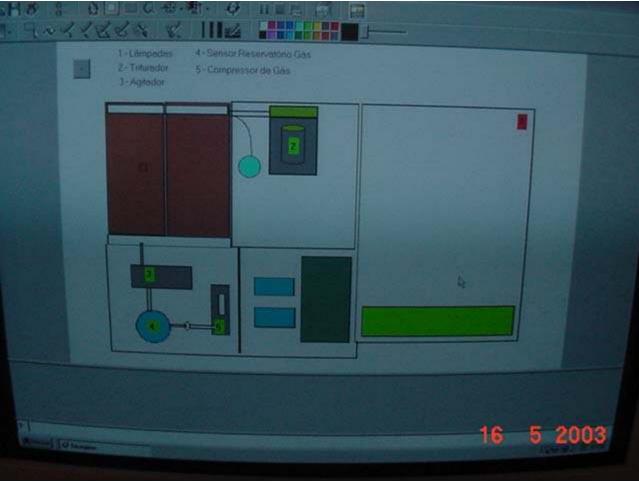
- open design
- •low-risk tinkering
- protection for the uninformed user
- secure BIOS
- protection against irreversible damage
- strong authentication between users
- "scrutinizable" software



# How will children use the laptop for learning?





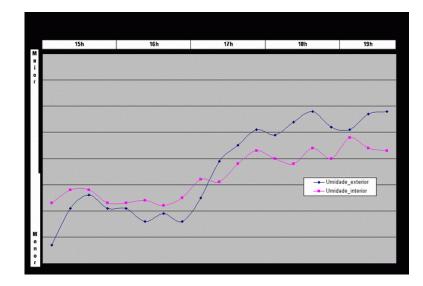


#### ONE LAPTOP PER CHILD









#### ONE LAPTOP PER CHILD

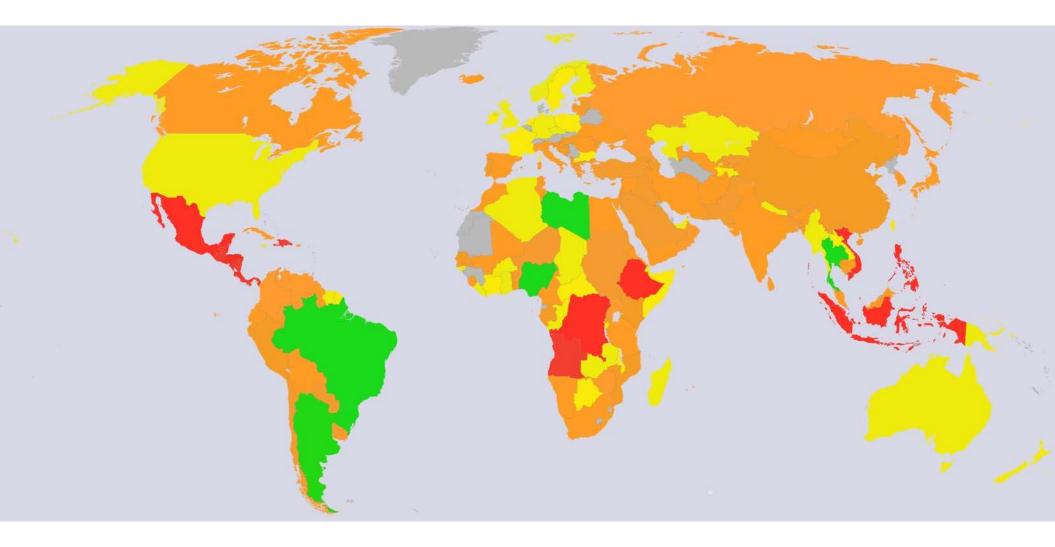








### Where?



ONE LAPTOP PER CHILD



#### Roll out

- B1: November 2006 (1000 machines)
- B2: December 2006 (500 machines)
- B3: January 2007 (3500 machines)
- C: March/April 2007
- Mass production (June/July 2007)
- 1-million units/month by the end of 2007

