



One Laptop Per Child (OLPC) talk  
at Carleton Breakfast 11/13/08 by  
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More info about OLPC :

Fred's: <http://fholson.cohousing.org/olpc/laptop.htm>

Main OLPC site <http://laptop.org>

Give one Get program to donate an OLPC to  
third world child and get one for \$399 starts again  
Nov. 17, 2008 . See <http://www.amazon.com/xo>

Labels in picture. (clockwise):  
Antennae, Microphone/Indicator light,  
Camera/Indicator Light, 2 USB ports, Speaker, Game  
buttons, Power Button, Power Light, Latch, Stylus  
Area, Touch Pad, Mouse Buttons, Latch, Screen  
Rotate, Directional Pad, Speaker, USB Port,  
Speaker/Mic Audio Ports. (middle): Storage access\*,  
Wifi Access\*, SD Slot, Battery Light (\* lights)

Highlights of non-profit OLPC org & current XO-1 model:

- o Goal is universal education of world's children via access to learning communities and to the Internet using purpose built laptops. Supports constructivist learning. OLPC org is huge world wide collaboration.
- o Hardware design goals: rugged, low cost, long battery life laptop. Modest performance accepted with rugged, downsized (about 9x9x1.25 inches) case.
- o Relatively environmentally friendly (fewer toxics).
- o 433 MHz AMD Geode LX700 CPU
- o Keyboard is 71% normal size, moisture resistant membrane but usable.
- o No hard drive - 1 Gigabyte Flash drive, 256 MB RAM (currently) 3 USB ports (for external USB flash drive etc) , camera, microphone and speakers built in.
- o Innovative dual mode (backlit-color/sunlit-monochrome) hi-res 7.5" LCD display.
- o Ebook ('tablet') mode. Display turns around and folds flat. CPU mostly sleeps in ebook mode to extend battery life considerably (12 hours?)
- o Built-in wifi with ability to access other OLPCs directly as well as Internet
- o Can be recharged from any source of 12 volt DC including solar & ext. hand crank charger tho the latter is still not too practical (Fred's estimate). Future lower power versions and better power options may improve this. Recharges quickly from 110/240 volt wall plug. Power is an ongoing challenge / problem.
- o Power saving suspend mode (10/08) About 15 hour battery life in suspend (wifi on)
- o Special Linux based evolving, upgradeable open source software that uses collaborative learning environment metaphor GUI "Sugar", instead of usual desktop Sugar has a "journal" of activities used with links to files instead of usual access to filesystem. Can be frustrating to experienced computer users.
- o Numerous built-in applications - "activities" including Chat, wordprocessor, web browser, music programs, record (from mic and camera), Draw, Calculate, Memorize (game like 'concentration' - match arith. prob & answers), Measure, News Reader. Three simple programming programs: 1) Etoys (animated objects), 2) Turtle Art (Logo-like), 3) Pippy (simplified Python that Sugar is written in), Terminal (to access Linux for advanced users and development).
- o Goal of mass production at \$100 per laptop in 2008 not yet met but cost expected to decline as production increases.

