#### LOW-COST LAPTOPS FOR ILLINOIS STUDENTS:

#### INFORMATION PACKET



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### SECTION 1 – SUMMARY OF FAQS

#### Of all the things schools need, why laptops?

Laptops are as good or better than other learning tools at encouraging:

- Fundamental learning in reading, writing, math, science, etc.
- Tech literacy those essential "21st century skills"
- Creativity and expression using art, music, and new ideas
- Learning beyond the classroom walls

#### Who is selling low-cost (under \$400) laptops?

At least five different organizations: Asus, Elonex, NohrTec, Everex and One Laptop Per Child. (See attached comparison sheet for details.)

#### Why low-cost?

Because money for education is limited, a low-cost mandate ensures that more children will benefit. Plus, sub-\$400 machines are equally as powerful for fundamental skills and computer literacy training as any \$1,000+ device. Children—especially young children—do not need to learn how to use really expensive software. Giving them an early start with low-cost laptops will make it easy for them to one day, if necessary, master more costly equipment and software.

#### Why should anyone invest in cheap, inferior technology?

Each of the low-cost laptops pictured above offers kids an infinite number of ways to write, read, solve math and science problems, and express themselves creatively. With Internet access, each of these WiFi-enabled machines provides a worldwide library of information and communication – a gateway unbounded by the walls of a classroom. Low-cost laptops can run using familiar Windows-based operating systems, and they feature innovations in display, storage, processor speeds and software widely thought unimaginable just 5 or 10 years ago.

#### Why (elementary school) children?

In a technology-rich world, we should not wait for high school to make our kids confident, competent computer users. Training kids in responsible computer and Internet use early on can deter misuse later in life.

## How will schools get technical support for all these laptops?

Illinois is a state rich with technical expertise in its schools, libraries, companies and homes. This project will call on the state to act as a community so we can build the brightest generation of computer users anywhere in the world.

# What infrastructure is required to support every child having a laptop?

Mostly, schools will need adequate electrical outlets to recharge laptop batteries. Wireless Internet networks will enhance the experience but aren't necessary.

# Once the kids get the laptops, do they own them for life? Will the laptops become property of the school or something else?

Schools should make this decision. Schools may decide to take ownership of the laptops, or to make them the property of students.

#### Won't the laptops get broken a lot?

Not if Illinois' existing laptop program is any guide. The vast majority of students who receive laptops provide them with great care and protection.

### How will schools protect all these laptops from theft?

As with damage, theft has not been a serious problem in the existing Illinois laptop program. Of the roughly 5,000 distributed, less than a dozen laptop thefts have been reported.

# How will schools get good educational content on all these laptops?

Educational content is growing by the second on the World Wide Web. Sites like Gutenberg.org and wowio.com make thousands of books available for free. Librarians and teachers can help, too.

# Is there any precedent for large-scale, low-cost laptop education projects?

Birmingham, Alabama; Forest Park, Illinois; Peru; Uruguay; Haiti; and others.

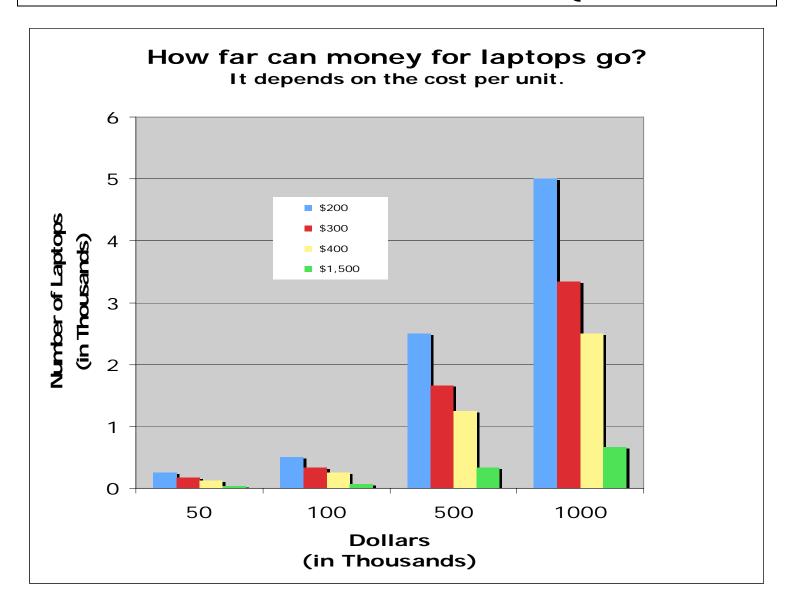
# How will we control the way these computers are used at student homes? How will we protect kids from the scourges of online predators, gambling and pornography?

Like any learning tool, laptops can be misused. Parents, teachers and administrators will have the important job of helping kids make responsible decisions with their laptops.

# Won't students without Internet access at home suffer by comparison?

A kid who goes home with a laptop and no Internet access is still better off than a kid who goes home with no Internet access and no laptop.

### SECTION 2 - COST-RELATED FAQS



In a world of limited resources, how can communities get low-cost laptops into the hands of their schoolchildren?

#### Here are three creative ideas being pursued by communities in Illinois:

- ! Make a direct appeal to the community (business leaders, churches, service clubs, the PTO, the public at large, or all of them) asking for voluntary sponsors to purchase low-cost laptops for the school.
- 2. Work with the State Board of Education to identify existing revenue streams that might be used to purchase laptops. One such funding stream might be to use textbook funding to replace paperbound textbooks with online textbooks at a reduced price. The resulting surplus might be used to purchase laptops.
- **3.** Call your state Senator to express your support for HB5000, the Children's Low-Cost Laptop Act. If HB5000 were to become law, it would create a grant program for elementary schools to purchase low-cost laptops.

# Where can I go to get information on how to integrate laptop learning into the curriculum and classrooms?

#### Illinois State Board of Education (ISBE)

ISBE offers school districts professional development training through its existing programs. Schools can request the topics of training they would like provided to their teachers.

For more info, please contact: Faith Bishop, 217.557.7323, fbishop@isbe.net.

# Where can I go to get information about digital textbooks and content for laptops?

#### Please go to Section 3 on page 5 for a list of valuable resources

A variety of textbooks and literary books are available for download either for FREE or for a marginal fee. Please review the "Online Publishers" page in this packet for a list of these publishers and their contact information.

#### Where can schools go to obtain technical support for laptops?

#### **Low-Cost Laptop Vendors**

Each vendor will offer a unique technical assistance package. Prospective buyers will need to determine which package best suits their needs.

#### **Regional Technology Centers**

The State of Illinois has network specialists strategically located throughout the state to provide school network support services. For more info, please go to <a href="http://www.illinois.net/rtc/default.htm">http://www.illinois.net/rtc/default.htm</a>.

#### **Learning Technology Centers**

The State of Illinois has technical staff that can provide professional development to teachers. They offer workshops throughout the year for school staff members interested in technology and learning. For more info, please go to

#### The Illinois Math and Science Academy (IMSA)

The Center for the Advancement and Renewal of Learning and Teaching in Mathematics, Science, and Technology at Illinois Mathematics and Science Academy® (The Center @ IMSA) serves teachers and school systems through professional development programs, and provides mathematics and science enrichment programs for Illinois students.

For more info, please contact www.imsa.edu or 630.907.5000.

#### **Manufacturer Warranties**

Each of the low-cost laptop manufacturers offer different warranty and repair options. When selecting a laptop, these options should be considered relative to the unique demands of each prospective buyer.

### SECTION 3 – RESOURCE - RELATED FAQS

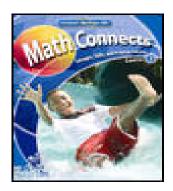
#### Which publishers make digital textbooks?



#### Houghton Mifflin

Illinois Public School Sales Rep Janet Luna 800.787.8707 x 2263

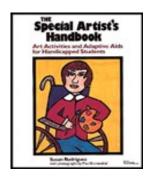
Illinois Private School Sales Rep Sherie Grindstaff 800.426.6577 x 6116



#### Brown & Benchmark Publishers

Grades 6-12 Glencoe Online Textbook Regional Sales Division 800.762.4876

Grades K-5 MacMillan Online Textbook Regional Sales Division 800.789.2665



#### **Pearson Prentice Hall**

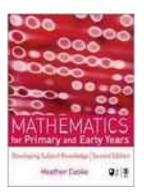
Northern Illinois Sales Rep John DuBois 847.432.3640 800.435.3499 x 7948 John.DuBois@pearson.com



#### W.W. Norton

Sales Office Victoria Kiely Grades 3-8, supplemental materials 800.822.1080 x 215

Grades 9-12, advanced placement materials 800.822.1080 x 280



#### eBooks

112,000 popular, professional and academic ebooks from the world's leading publishers

http://www.ebooks.com/subjects/education

#### Where can I find FREE digital content for laptops?



#### The Internet Archive

IA is a 501(c)(3) non-profit that was founded to build an Internet library.

http://www.archive.org/details/texts

#### Among it's FREE downloadable contents are:

191,887 items

#### American Libraries

Colorful Favorites Goody Two-Shoes. Publisher's chromolithographed pictorial wrappers c1888 Caw caw; or, the chronicle of crows. The house that Jack built, a game of forfeits: to which is added, The entertaining fable of "The Magpie"...

20,377 items

#### Project Gutenberg

Books of Interest Alice Underground: being a facsimile of the original book later developed into Alice in Wonderland (1882) The Dance (by An Antiquary): Historic Illustrations of Dancing from 3300 B.C. to 1911 A.D. Gulliver's Travels ...

2,424 items

#### Children's Library

Books of Interest Abroad (1882) What the moon saw: and other tales (1866) The crooked man and other rhymes (between 1851 and 1870) Carlo, or, Kindness rewarded (ca. 1870?) Jack and Jill and old Dame...



#### Discovery Education

Lesson Plans, online textbooks, and more.... 800-323-9084

http://www.discoveryeducation.com/products



#### Wikipedia Selection for Schools

Wikipedia Selection is about the size of a 15-volume encyclopedia (24,000 images and 14 million words), and includes essentially all topics in Wikipedia rated "Good" or higher by Wikipedia itself at date of production. The content can be navigated using a pictorial subject index, or a title word index of all topics.

http://schools-wikipedia.org



#### **OLPC Activities Page**

This website has a myriad of FREE educational software that can be downloaded.

http://wiki.laptop.org/go/Activities



#### Pokemon Learning League

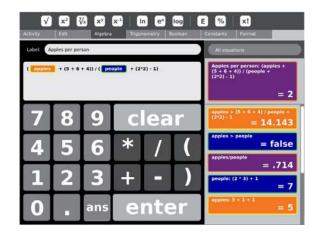
This website includes a variety of math, science, language, and life skills educational games for FREE.

http://www.pokemonlearningleague.com

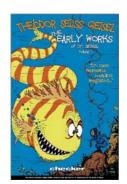
#### How can a student learn math with a low-cost laptop?

The free XO calculate activity provides a generic calculator. The interface provides the simplest functions directly and should therefore be easy to use for the youngest children. However, it does support more complicated math and variables.

Available at <a href="http://wiki.laptop.org/go/Calculate">http://wiki.laptop.org/go/Calculate</a>



#### How can a student learn reading with a low-cost laptop?



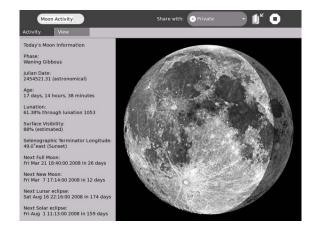




Project Gutenberg (<a href="www.gutenberg.org">www.gutenberg.org</a>) and Wowio (<a href="www.wowio.com">www.wowio.com</a>) make thousands of free .pdf books available on the Internet. Gutenberg's books are part of the public domain and Wowio's are advertiser-supported.

All of the low-cost laptops can display .pdf files.

#### How can a student learn science with a low-cost laptop?

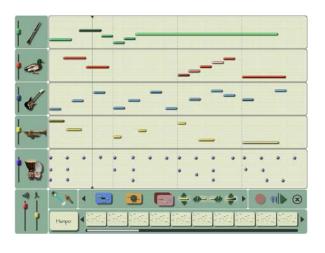


Moon is a free simple Lunar phase laptop activity, including upcoming Lunar eclipse information and effects. In sharing mode, children can point out features and places of interest to each other.

Available at <a href="http://wiki.laptop.org/go/Moon">http://wiki.laptop.org/go/Moon</a>

#### How can a student learn music with a low-cost laptop?





TamTam is a free suite of four music and sound related computer activities.

TamTam Mini is an introductory program to engage even very young (2-year-old) children in exploring music on the XO. Click on an instrument and then use the keyboard to play notes.

TamTam Jam is the music performance activity. Sounds are played by striking individual keys on the keyboard. There is a small "beatbox" to generate rythms and a simple sequencer to record short snippets of keyboard playing. Kids can also enjoy collaborative playing on a shared synchronised drum pulse.

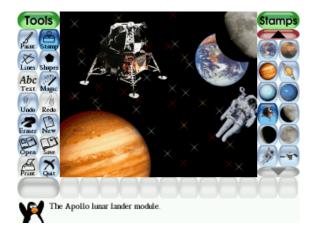
TamTam Edit is a colorful and intuitive graphical interface to create, modify and organize notes on five virtual "tracks", a palette of close to a hundred sounds and a music construction model that allows virtually limitless variations in all musical styles.

synthLab is an advanced program for older children who are ready to venture into sophisticated sound design. synthLab is a physics lab and sound synthesiser modelled on Max/MSP.

Available at <a href="http://wiki.laptop.org/go/TamTam">http://wiki.laptop.org/go/TamTam</a>

#### How can a student learn art with a low-cost laptop?





Tux Paint is a free computer art activity for tiny kids. Most 3-year-old kids and many 2-year-old kids are able to use it, yet 10-year-old kids (and kid-like adults) enjoy it too. Tux Paint is translated into about 70 different languages, including big-alphabet and right-to-left ones.

Available at http://www.tuxpaint.org/download/

#### How can a student learn typing with a low-cost laptop?



Typing Racer is a 3D racing game designed to help improve typing in a fun way. In this game, alphabets (or numbers, depending on what you choose at start-up screen) are scattered around the course. Your objective is to press the letter (which can be Japanese Hiragana/Katakana characters, English alphabets, or even numbers) on your keyboard that matches the letter that is closest to you to make it disappear. Run into the letter, and you will slow down; you will speed up as you hit the correct keys. You can even change the difficulty level to suit your typing skills.

Available at <a href="http://free-game-downloads.mosw.com/abandonware/pc/edu-cational-games/games-s-z/typing-racer.html">http://free-game-downloads.mosw.com/abandonware/pc/edu-cational-games/games-s-z/typing-racer.html</a>



Mario Teaches Typing is a full-featured typing program that has something for everyone, although kids with no typing experience will get the most from the program-- while enjoying cute antics of Nintendo's popular Mario brothers.

If you are a beginner, the game will teach you from the ground up, letter by letter. One of the program's best features is the Report Card, which not only displays your accuracy in percentage and your WPM (words per minute) count, but also "problem keys," i.e. keys you have most trouble with. And as if that is not enough, many sentences you will be typing are taken from famous plays, novels, or historical documents, with the source always given at the end.

Available at <a href="http://free-game-downloads.mosw.com/abandonware/pc/educational-games/games-e-m/mario-teaches-t-yping.html">http://free-game-downloads.mosw.com/abandonware/pc/educational-games/games-e-m/mario-teaches-t-yping.html</a>

#### How can a student learn social studies with a low-cost laptop?



Geoquiz is a free geography guessing game for computers.

Available at <a href="http://wiki.laptop.org/go/Geoquiz">http://wiki.laptop.org/go/Geoquiz</a>

# SECTION 4 – WHAT CAN \$400 BUY?

OLPC XO (\$200)



Processor - AMD

Storage – 1024 MiB SLC NAND flash

Memory – 256 MiB dynamic RAM

Screen size – 7.5"

Operating system – Linux Sugar

Weight -3.2 lbs

Battery technology – 5-cell NiMH

Maximum battery life – 22.8 hours

Contact:

Nia Lewis Executive Assistant at OLPC nia@laptop.org

For more information visit: http://wiki.laptop.org/go/Home

#### Elonex One (\$200)



Processor - TBD

Storage - TBD

Memory - TBD

Screen size - TBD

Screen resolution - TBD

Operating system – TBD

Weight - TBD

Battery technology - TBD

Maximum battery life – TBD

Contact:

Stuart C. Smith

Sales Director at Elonex International Ltd

Office +44 (0)871 222 3456

Cell +44 (0)7703328114

ssmith@elonex.com

For more information visit:

http://www.elonexone.co.uk/vision.html

#### NorhTec Gecko (\$225)



Processor - VIA C7M with VX700

Storage - 1 GB, 4GB 40GB

Memory - 256 to 1GB

Screen - 7 inch

Resolution -  $800 \times 480$ 

Operating System - Linux or Windows

Weight -2.2 lbs

Battery - Lithium-Ion

Maximum Battery - 6 hours

Contact:

Michael C. Barnes

Founder and President of NorhTec

mbarnes@norhtec.com

For more information visit:

http://www.norhtec.com/products/gecko/index.ht

ml

#### Asus Eee 2G Surf (\$300)



Processor – Intel Celeron M

Storage - 2 GB Solid State Drive

Memory – 512 MB DDR2 SDRAM

Screen size – 7"

Screen resolution – 800 x 480

Operating system – Linux Xandros

Weight -2 lbs

Battery technology – 4-cell

Maximum battery life – 3.5 hours

Contact:

Donald Leung Asus Eee Product Manager DONALD\_LEUNG@asus.com 510-676-5256

For more information visit: http://eeepc.asus.com/global/news11212007.htm

#### Asus Eee 4G (\$400)



Processor - Intel

Storage - 4 GB Solid State Drive

Memory – 512 MB DDR2 SDRAM

Screen size – 7"

Screen resolution – 800 x 480

Operating system – Linux Xandros

Weight – 2 lbs

Battery technology – 4-cell

Maximum battery life – 3.5 hours

Contact:

Donald Leung Asus Eee Product Manager DONALD\_LEUNG@asus.com 510-676-5256

For more information visit: http://eeepc.asus.com/global/news11212007.htm

#### Everex Cloudbook (\$400)



Processor – VIA 1.2 GHz

Storage – 30 GB

Memory – 512 MB DDR2 SDRAM

Screen size – 7"

Screen resolution – 800 x 480

Operating system – Linux gOS Rocket

Weight -2 lbs

Battery technology – 4-cell Lithium-Ion

Maximum battery life – 3 hours

#### Contact:

Paul C. Kim, Director of Marketing Everex (First International Computer) Tel: 510.252.8829 paulkim@everex.com

For more information visit: http://www.everex.com