Community News

A weekly update of One Laptop per Child

The XO is becoming a Uruguayan national icon. Go to http://www.ceibal.edu.uy/gobiernoelectronico/pdf_libro/Libro_CEIBAL_en_la_sociedad_del_siglo_XXI.pdf for a look at UNESCO's extensive Spanish-language report on the Ceibal deployment. Also, see an Argentine newspaper editorial below.

Learning

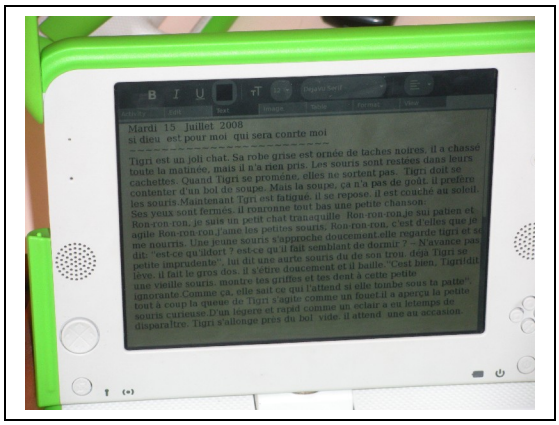
Haiti: The students at Republic de Chile School continue to have a great time exploring with their XOs. The fifth graders erupted with joy as they discovered "YouTube" during their continued exploration of electricity. They ran around to the other kids and teachers to show off their discovery. The fifth grade teacher expressed concern whether her students fully understood all the information about electricity that they were getting online.

The fourth graders spent the first half of the week analyzing their video interviews of their family and community as part of their transportation study. Several of them were unable to complete their interviews because their parents, fearing for their safety, required the children to hide their XOs when outside of school. There was some discussion among the teachers whether parents are hindering learning in their efforts to protect their children.

The third and second graders spent the first half of the week learning how to create their own game in Memorize. Accustomed to old top-down pedagogy, it took some time for them to let their creative instincts take over. Not to be left out, the first graders showed off their writing and articulation skills (see image below).

During the second half of the week, the Haitian core team and Wanda Eugene of OLPC took a trip up the mountain to meet with the teachers, directors, and administrators in Jacmel, the next site where the XOs will be distributed. Thursday morning, they visited Cap Rouge, which is a wifi-ready city, in the region of Jacmel, where this is no electricity and whose public primary school has an enrollment of more than 700 students. The school itself is solar powered.

The teachers, directors and administrators were really receptive and asked some big questions, such as, How will the XOs transform education for everyone?



Rwanda: Juliano Bittencourt met with Théoneste Mutsindashyaka, the state secretary for primary and secondary education, who re-affirmed his commitment to the project and stated that Rwanda will be expanding its commitment next year. Mutsindashyaka also has decided that the deployment in Rwanda should start by saturation of Kigali, the capital city of the country where electricity is available.

Juliano also briefly met with Daphrosa Gahakwa, the minister of education, and Nkubito Manzi Bakuramutsa, executive director of the Rwanda Information Technology Authority - RITA. Mr. Nkubito shared his enthusiasm for hosting a regional OLPC workshop in the country and offered total support.

The RITA team has translated 96 percent of Sugar into Kinyarwanda. They are now working to improve the quality of the translation. The Rwandan core team and the OLPC team began started to work with Scratch in order to give them a better understanding of the tool before beginning its translation. The team also gained access to the digital version of the text books used in Rwandan schools. Together with the staff from RITA, we are studying the best way to load this content inside the laptops

Birmingham: The team continued to work with youth at the Birmingham Public Library to learn about diagnosing problems with the laptops as well as experimenting with their disassembly.

They held meetings with the technical project manager to discuss a plan for bringing laptops to all the primary schools. They will meet with the city's curriculum leader next week to continue to work on the professional development plan.

The summer camp is going well. Students have formed into groups and plan to create projects addressing health issues from diabetes to nutrition. They intend to make commercials and games in Scratch to help educate the community about their chosen healthcare topic.

Mongolia: The core team and the OLPC group went to the countryside in the north of Mongolia to begin delivering laptops and to work with children, teachers and parents. Due to lack of connectivity in the region, the full report will arrive in the next two weeks.

Cambridge: The group developed more materials for doing solid learning projects using the programming languages available on the XO for distribution to the countries.

Technology

Networking

1. Deepak Saxena continued to test 8.2 and to work on fixing release issues, including digging into a suspend/resume lockup and improving power management control via interfaces to the EC.

2. Ricardo Carrano spent his first week in Princeton diagnosing various networking issues reported on Trac for our upcoming release. In the process he managed to find another serious bug: XOs won't destroy your network even if OLPC staff tells you that it will ;-).

3. Ankur Verma worked on extending the communication between XO and other mobile devices that do not support Internet Connectivity - i.e., the only way possible to communicate with them is through text messages/voice calls. A modem/GSM AT compliant mobile phone is intended to be connected with the school server. It hosts a SMS Gateway which can be accessed by XO through web browser.

Ankur tested this by hosting up SMS Gateway on his computer and was able to send and receive messages on XO as shown here: http://wiki.laptop.org/go/SMS . He also worked on integrating a GSM phone so that it can be shared between multiple XOs for SMS messaging and demonstrated that by using off-the-self open source components.

4. Michail Bletsas attended the 11th International Symi Symposium in Ouranoupolis, Greece. The Symi Symposium is an invitation-only event organized every year by the Andreas G. Papandreou foundation. It is attended by a number of high level politicians, academics, business and civil society leaders. This year's roster included a Nobel Prize-winning economist and two European heads of state, as well as many international development officials. Michail spent a lot of time demo-ing the XO to very enthusiastic audiences, many of whom recalled having heard Nicholas describe the OLPC plan four years ago during the 8th Symi Symposium. On his way back, Michail stopped in Athens to keynote the “1st International Conference on Pervasive Technologies Related to Assistive Environments.”

Multi-Battery Charger

5. Lilian received a new charger board with fan control and temperature sensors. She will update the firmware to read the system temperature and control the fan accordingly. A prototype unit with a fan (set to full speed) is on its way to Flextronics for them to run a suite of thermal tests on the power supply while fully loaded.

Andres Salomon

6. Fixed an ov7670 bug Daniel Drake had noted and sent the patch upstream. He also sent some of our mmc/sd quirks upstream, so that 2.6.26 users would be able to use SD cards. In the process, we discovered that one of the fixes we were using was actually incomplete. Completing it meant that larger SD cards (8gb and such) appear to work.

7. Merged Linux 2.6.26 into the master. In upstream merge window news, 2.6.27-rc1 will include sysprof (via ftrace), so we can stop carrying around that module, and will include UBIFS (if we decide to play with it).

8. Worked with Richard on some battery patches, committed them to testing/master. Unfortunately, he's not happy with them yet, so they need additional work before they can go upstream.

9. Committed the new mouse driver, prepared it for upstream, but discovered a race a few days ago. He prepared a fix which awaits testing.

10. Committed the various spec file cleanups/mkinitrd removal stuff to olpc-2.6-rpm

11. Tested an fb blanking fix from Jordan, as well as another console fix from lkml. They work, but there's still some weird blanking problem with either the kernel or geode hardware. Now that we turn off the console, though, it's a pretty low priority.

12. Spent a bit of time documenting outstanding patches in our kernel tree.

13. Andres also installed Debian Install and discovered Joyride bugs.

14. Running Gnome (on Debian testing) on the XO still continues to work well (other than a jffs2 bug that caused my home directory to get eaten!).

Killing off /versions and the initrd freed up lots of memory and disk space (also, using xorg's Geode driver rather than fbdev saves a lot of memory for some reason).

-/+ buffers/cache: 153484 83828

That's with 83MB free with Gnome (Gnome-panel, nautilus managing the desktop, etc), epiphany-browser, claws mail, pidgin, network-manager, and a few Gnome-terminals running. He's pretty unhappy w/ firefox3/xulrunner1.9, but maybe they've worked out the bugs in the latest update.

Activities

Brian Jordan

16. Wrote a script for getting activities from git repositories and symlinking them from the Activities folder. This allows the user to simply git pull the newest versions of activities from their repositories while keeping them working in Sugar. We are working towards engaging developers with simpler participation steps.
http://wiki.laptop.org/go/Activity_co-op

17. Worked on fleshing out OLPC Physics portal page
http://wiki.laptop.org/go/Physics

18. Continued work on the physics activity, collecting a lot of good advice from teachers and testers. Ben Schwartz and Martin Langhoff sent messages to OLPC-Sur announcing physics and asking for input. This has resulted in multiple contacts (one speaks English and is at MIT for the summer) and is a prime example of the importance of cross-lingual communication throughout our organization.
http://lists.laptop.org/pipermail/olpc-sur/2008-July/000421.html
http://wiki.laptop.org/go/Physics_%28activity%29

Bobby Powers

19. Continued to work on his system dynamics activity, Model. He made some small visual improvements but spent most of the time on the simulation engine. Bobby also made a bunch of mockups of ways to extend the activity and updated some documentation on the wiki.

For more information:
http://wiki.laptop.org/go/Model
http://wiki.laptop.org/go/Model/Mockups

Localization

20. Sayamindu Dasgupta worked on the language pack issue this week. He has come up with what he believes is a fairly usable interim solution. His mail to the localization mailing list (http://lists.laptop.org/pipermail/localization/2008-

July/001233.html) has the details on the new features and enhancements in the newer language packs. Sayamindu also investigated some of the keyboard layout issues this week, and has been following up with the Fedora maintainer for xkeyboard-config to best resolve the issues in the newer development OS releases.

UI & Sugar

21. Eben Eliason continued to create, triage, and close tickets relevant to the pending release. This included creating new mockups for a software update system, an icon for the Help activity, and a patch which logically orders the control panel modules, among other things. This also included initiating a (perhaps too detailed) discussion about the plan for activity versioning moving forward. A consensus has yet to emerge, so the question has been deferred.

22. Eben also spent time discussing possibilities for handheld mode with Alessandro, the season of usability student. Together they laid out various interactions that should be supported in this mode, discussed pros and cons of various interaction models, and began a series of sketches to visualize the possibilities which will later be discussed with Sugar developers for technical feedback.

23. Finally, Eben spent some time reviewing the release notes and cleaning up any information regarding the brand new look of Sugar and the improved interactions that the new designs offer.

24. Marco Pesenti Gritti returned from vacation. He answered backlog mail and spent some time thinking about the interaction of OLPC and SugarLabs release processes. Discussion about it has been going on the mailing list and the irc channel. Progress has been made, but there is more thinking and work to do. Marco also helped out with 8.2.0 bug fixing by triaging and diagnosing tickets and reviewing patches. Finally he fixed several problems with the zoom level logic in Joyride.

25. Tomeu Vizoso continued fixing bugs, added the ability to delete activities from the home view and solved the remaining issues that prevented Google Gears from running on the Browse activity.

26. Faisal Anwar worked with the Sugar community this week to document best practices for internationalizing activities and integrating fonts using Pango. Next week he will document the use of the clipboard. Faisal encourages the community to visit http://wiki.laptop.org/go/Sugar_Almanac and to offer feedback and concrete suggestions.

27. Morgan Collett tested his fix for blocker #7444 in Joyride. He tested collaboration with Joyride builds, and struggled to get five XOs on a Mercury

KOB WL465 AP to reliably connect to a Jabber server – usually one or more of them would not connect or be routable from the others. The problem might be a funky AP, although it worked reliably with fewer XOs. Morgan assisted James Munro with packaging updated Sucrose packages for Ubuntu.

28. Elliot Fairweather continued to work on the BuddyInfo interface for telepathy-synapse and now has Cerebro/Synapse enabled buddies appearing on the mesh view - http://people.collabora.co.uk/~elliot/synapse_buddy.png . Next week, he will start implementing the Activity Properties interface, and hopes to make some progress towards working text channels.

29. Guillaume Desmottes made good improvements on Gadget integration into Sugar. The presence-service is now able to properly manage buddies and activities from gadget views and update them according Gadget events. He also installed Openfire and started to test Gadget with it.

System

http://wiki.laptop.org/go/User:DanielDrake/Log#Week_of_July_14_-_July_18 .

30. Daniel Drake continued his bugfixing efforts for the v8.2.0 release. He identified a problem in the wireless driver that was preventing simple mesh presence from working; fixed installation of content bundles; and removed a number of unnecessary packages from the build. TamTam is currently broken on 8.2, Daniel started working on bringing it back into shape.

31. Simon Schampijer released a new xulrunner rpm (xulrunner-1.9-1.olpc3.2) which contains olpc specific patches. The layout on many sites were broken without these patches. It is available in Joyride >= 2155.

32. Simon added documentation for the graphical control panel http://wiki.laptop.org/go/Sugar_Control_Panel#The_graphical_user_interface and fixed related control panel bugs like 7510.

33. This week saw the midterm evaluation of the GSOC projects in which Simon mentors Hemant Goyals' “Integration of Speech Synthesis in Sugar Environment” project. Simon's evaluation is absolutely positive. Besides being satisfied that the project is on track, he is particularly happy with the interaction with Hemant. He is showing great interest into learning and does not stop to go where it might hurt in the first place (e.g. the picky Fedora Package review process :). You can read more about Hemant's project at http://wiki.laptop.org/go/User:Hemant_goyal .

34. C. Scott Ananian continued working this week on an activity update control panel (http://dev.laptop.org/ticket/4951) inspired by the community's work on XO-get and similar tools. Activity authors, please consider adding 'update_url’ fields to your activity.info files! (http://wiki.laptop.org/go/Activity_bundles).

35. Erik Garrison tested LZO compression performance, and investigated the requirements to use it on the XO. He also attempted to learn more about OLPC's long-term software distribution plans. He spent most of the later part of the week working on Trac #7407.

Firmware

36. Richard worked on EC code, implementing various bug fixes that have piled up in his queue. He plans on releasing them out into Joyride next week after a few more fixes. The most notable fixes are:

- New board ID code for the C3 spin.
- Critial voltage warning prior to the EC turning off the system both with the LED (red/yellow flash) and with a critial SCI
- New EC command that permits finer control over what battery conditions issue a battery status SCI.
- High-Speed EC command protocol. Approx 2x faster. ("Even faster if I turn off my debugging output," he reports.)

37. Richard worked with Paul Fox to get the sdcc port of the EC code base actually booting on hardware, which is wonderful news. Richard looks forward to when he can stop using the Vmware/virtual box setup.

38. For 8.1.2 Richard released firmware q2e11 which is based on the new OFW2 code base capable of booting Windows. All of the Windows boot features are only active if security is disabled. The only EC code change is the updated board ID for C3.

39. Richard also started work with Deepak on Trac #7458. There seem to be some messages in the kernel logs indicating EC timeouts. It takes a few thousand suspend/resume cycles for the problem to occur so testing is slow.

40. Mitch Bradley got suspend/resume working for Windows XP under OFW2. There are still some reliability problems with XP suspend/resume, but getting it to work at all was a major milestone.

QA

41. The QA team (Joe Feinstein, Charlie Murphy, as well as Frances Hooley and Sean Hopkins - part time on loan from the Support team) continued with the Trac meeting. They also ran a full-length smoke test on the 8.1.1 backup release candidate.

42. Charlie wrote test cases for an "Under the tree "scenario for 8.2.0 testing, while Joe verified the stability of the "Under the tree" test bed running 8.1.1. Charlie has also worked on creation of the wiki-incorporated test case template.

43. Joe tested the experimental XO provided him by John Watlington. The machine is running build 708 and is equipped with the new C3 motherboard and Q2E11 firmware.

44. Joe and Charlie continued working with the volunteer group in Chicago on the simulation of the school environment and incorporation of the test documentation into the wiki.

Release Management

45. Michael Stone worked closely with Greg Smith to push us one week closer to release by conducting extensive ticket triage, running our release and software status meetings, updating wiki documentation, studying Semantic Mediawiki and Trac plugin architectures, advising Hemant Goyal and Martin on packaging issues, performing security work for Kim, Scott, Hemant and the Sugar team, liasing with Collabora on collaboration and NetworkManager, and performing some basic community maintenance with Fedora and with the Boston Linux and Unix group (BLU).

46. Greg Smith created a Releases page http://wiki.laptop.org/go/Releases with status and links to currently active releases.

47. Greg also triaged bugs and reviewed feature designs for 8.2.0. Updated 8.2.0 Release Notes (still draft and subject to change but getting better) at: http://wiki.laptop.org/go/Release_Notes/8.2.0

48. Greg started setting strategy and gathering requirements for 9.1.0

Support

49. Adam Holt returned from visiting almost 20 volunteers - at his own expense, as he reminds us. Adam drove well over 5000 km to Chicago and then Atlanta, and then back to Boston. He used Paul Fox's Roadtrip XO software all along the way to meet volunteers at their home/work addresses and beyond. It was an intense/heartbreaking/heartwarming (and hot, without A/C!) trip. Thanks to all who made this trip possible, opening their homes to Adam, as well as taking him to their favorite restaurants. Thanks also for the car repair advice, wireless, stories, and everything else.

50. Give1Get1 shipments finally are falling off, dramatically. Serious support-oriented preparations are now just beginning for this fall's new G1G1: (1) documentation, (2) improving support tools, (3) community networking...

Infrastructure

51. dev.laptop.org will pass 1/2 year of continuous uptime this week:

root@crank:~# uptime
 10:13:50 up 181 days, 6:36, 7 users, load average: 0.41, 0.56, 0.61.

52. All monitored systems report 100% uptime this week.

53. We are working with Boston Properties to evaluate the costs of adding a second rack to the 1CC datacenter.

The Manu Report

54. Food Force Project: http://code.google.com/p/foodforce/). This week:

- Functions have been added that provide the best resolution for a better child's experience of the project.
- The artwork now fits very well with the text display.
- A messaging system has been developed for the various stages of the project, making it a more interactive experience for the children.

In the coming week, Mohit will be working on including a mini map that will be displayed on the screen whenever the child wants to navigate/explore the village.

55. SocialCalc (Spreadsheet): The first version of the spreadsheet has been well received by members of the open-source community. A mailing list has been created to explore the use of spreadsheets in education and rural community development. Subscribe at http://lists.laptop.org/listinfo/socialcalc). Thanks to Henry Hardy for his great support.

56. K.S. Preeti continues to work on the toolbar to bring it completely in sync with the OLPC human interface guidelines.

Deployment


Carlos Slim

Mexico: Nicholas, Jorge Castañeda, Manuel Rodríguez and Carla Gómez Monroy met with Carlos Slim, Hector Slim, Johana Slim, Arturo Elías, Javier Elguea, Cecilia Soto, and Raul Cerón. On Monday, Telmex initiates the deployment of 30,000 XOs in several Mexican states, kicking off the largest pilot yet.

Trainer training is concluded. Teacher training starts in August, a few weeks prior to the start of the new school year. In an effort to make the pilot more far-reaching, the rest of the 20,000 XOs purchased by Telmex will be deployed at sites throughout Central America.

Nicholas, Jorge, Manuel and Carla, along with Enrique Chavero and Paula Rivera, also met with Fernando González, Mexico's sub-secretary of basic education, as well as key members of his staff. These included Juan José de la Mora, the educational technology coordinator, Rosalinda Morales, director of indigenous primary education, Ana Lía Babinsky, director of strategic planning, Virgen Robles, the sectoral coordinator, Leopoldo Rodríguez, director of curricular development, and Juan Martinez, a curricular development coordinator. They discussed how to roll out the machines in Mexico's primary schools.

The budget for the first phase allows for 20,000 XOs to be deployed at indigenous schools of one state in Mexico this coming school year. The second phase, now under consideration, would saturate two to four states the next school year. All the digital primary school curricula will be developed in parallel. Both processes will take several months. Jorge, Manuel and Brightstar will play key roles as deployment progresses, as will Carla, who will assist with the logistics.

Pakistan: Habib Khan brims with news, per usual. He reports a new marketing strategy has been devised for Pakistan, and will be launched today. Details next week. Also, Sonia Palwasha Khan, a faculty member at Bahria University in Islamabad, has signed on as a volunteer. A product of the Cambridge, Massachusetts, public schools, Sonia was excited to hear about XOs being deployed there, and in Pakistan. She is interested in examining the social impact of OLPC on the two societies.

Salman and Sonia Khan filed the following report about former students of the now defunct Atlas school, OLPC Pakistan’s first deployment (Weekend, July 13):

“Equipped with their OLPC’s at home, on the road, while traveling, playing and at work, the former students of Atlas Public School have shown their enthusiasm to keep learning despite the odds. The grilling heat and continuous power failures here in Pakistan make it difficult for even the best of us to work and think in air conditioned rooms. The story for the slum dwellers who mostly live under the poverty line, is quite different. Every individual must contribute to the family’s income for them to survive. Such is the case of the former students of the Atlas Public School.

“Their hunger for knowledge is the same as their hunger for food. Yet they strive to make ends meet. And they strive to keep learning. Last week we reported that our first pilot project, the Atlas Public School was shut down by the owner of the building as he was unable to cope with expenditures. The news was disturbing for the children as well as the entire OLPC team. However, when we sought out the children, we were pleased to learn that they had taken the initiative to create an OLPC XO Club. With or without a building, learning with the OLPC was on!

“This week we dedicated another day to these children in order to guide them, tutor them and observe changes in their behavior. We also attended another session of the XO Club meeting.

“The day began with the children setting out for work in the morning.

“Some of these kids sell fruits and vegetables in a nearby market, while others rummage through junk yards in search for recyclable materials.

Children using their XOs at work

“We talked to them during rest breaks as the day progressed. The kids had many questions which we answered. They showed us the things they had learned. Their behavior and talk was a sure indication of the importance of the OLPC in

their lives. The OLPC has been serving more than a just a learning tool, it's become a factor for social change. The OLPC children engage in positive learning activities, whenever possible. The level of conversation has risen not only between peers, but also in their interactions with their friends and family members.

"The impact on this community at large also needs to be mentioned here. During evening *jirgas* (local community center meetings) sessions are held where the adults use the children's XOs and try to benefit from the learning tools available on them. Parents are pleased that their children have been provided with the rare opportunity of learning. At home the siblings share the XO and are thus benefiting. The environment within homes is undergoing a gradual change. It is indeed a pleasant change with a renewed motivation to learn and smiles all around.

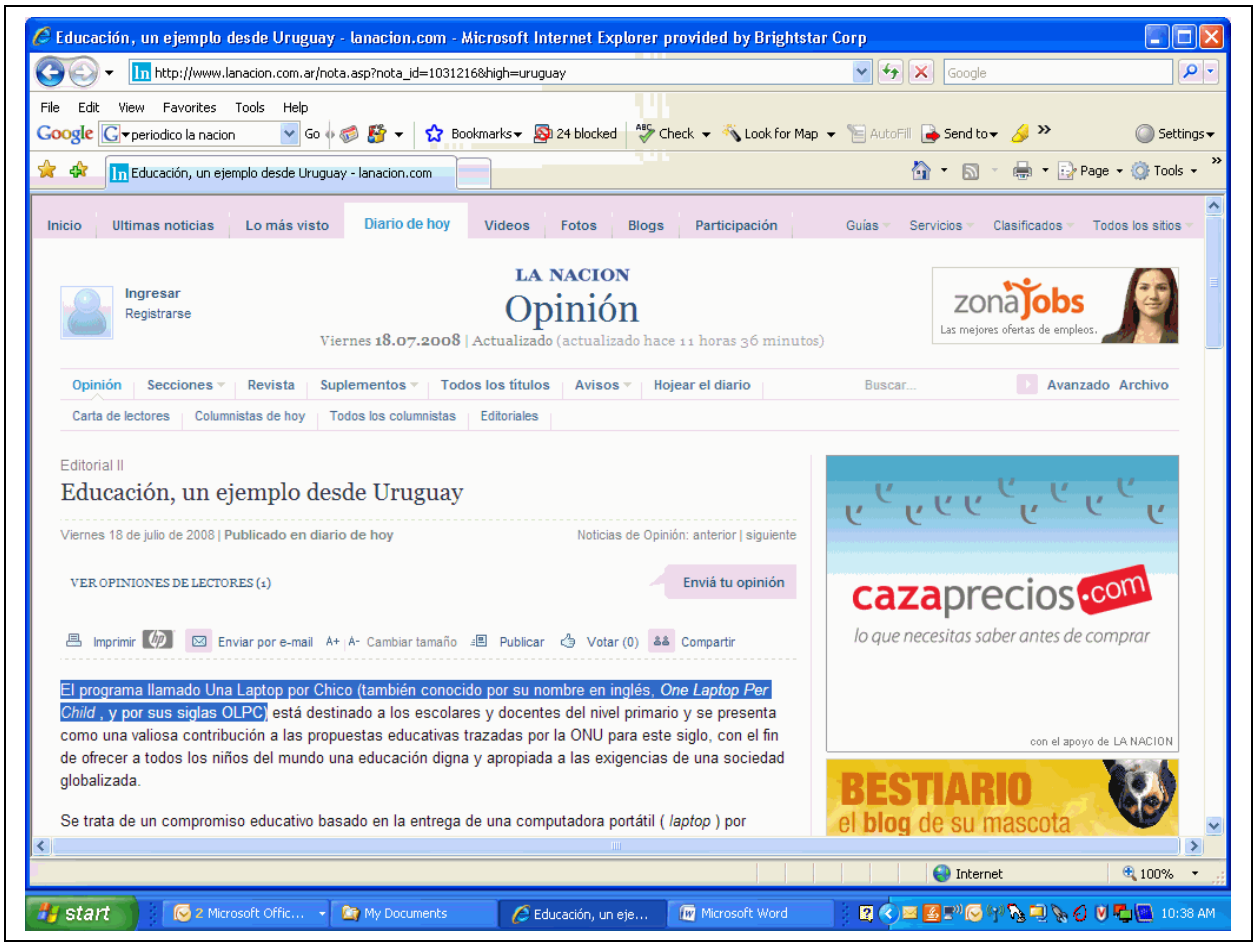
"During the XO Club meeting, the children shared the wonderful things they can do with their laptops with their friends. The club meeting is not only a learning session but has also become a showcase of talent. The children strive to learn and thus impress each other with the various things they can do with their machines. This has created a healthy competition amongst the members and participants.

"The meetings are light and fun. The kids showed us and each other picture albums they had created with their XOs. The pictures are helpful in indicating what's important to these children and how they perceive things.

An XO Club meeting

"With or without a school building, learning with the OLPC has continued. The XO has had a major impact on these children's lives. The enthusiasm to learn and to seek knowledge is great and can be found not only on the children, but the adults as well. The XO is not just a learning tool; it is becoming a factor for social change as well. Despite the setbacks, the changes are positive and extremely encouraging for us all."

And in other news…



An editorial in the July 18th editions of the Argentine newspaper, *Diario La Nacion,* discussed the Ceibal deployment at length, and urged action on similar plans for Argentina. Highlights:

"The OLPC program is a valuable contribution to the educational propositions developed by the UNO (United Nations Organization) for this century. Its main purpose is to offer all the children of the world a worthy education appropriate to the requirements of a globalized society.

“The OLPC program takes care of making sure that the laptops are delivered free of charge to the children and to the teachers. The governments assume the total cost of the project; bidding process, purchase, implementation, Internet connectivity, maintenance of the equipment and continuous training for the teachers and children.

“To date, more than 400,000 XO laptops have been distributed around the world by OLPC. In Latin America, Peru and Uruguay lead the program; In Argentina, in March of 2006, the Minister of Education at that time, Mr. Daniel Filmus, had announced he would go ahead with the OLPC project, to purchase one million laptops to be distributed among schools in Argentina. So far, the proposal is still in the air.

“In regards to Uruguay, the government is delivering more that 1,000 computers a day through their “Plan Ceibal.” This guarantees total coverage of their population (children and teachers) by 2009. This means 400,000 computers connected to the Internet. Uruguay will be the first country that will have achieved this level of penetration of information technology in their school-age population and represents a significant model whose benefits will extend to an entire generation.

“It would be good that soon Argentina could offer their school-age children and teachers, resources that will guarantee the accomplishment of one of the most important objectives of the millennium.”

Jobs

OLPC has openings posted for:

- X Window System/UI Engineer
- User Interface Developer for Sugar
- School Server Software Engineer
- Helpdesk Support Technician
- Field Network Engineer
- Networking Software Engineer
- Accounting Support Specialist

See http://laptop.org/en/jobs.shtml for more information.