# **Getting started**



Place the laptop with the XO icon face up and with the handle facing away.



Lift the ears to release the latches.



Lift the display up from the keyboard along the seam.



Push the power button to turn on the laptop.

(To turn off the laptop, hold down the power button for 10 seconds.)

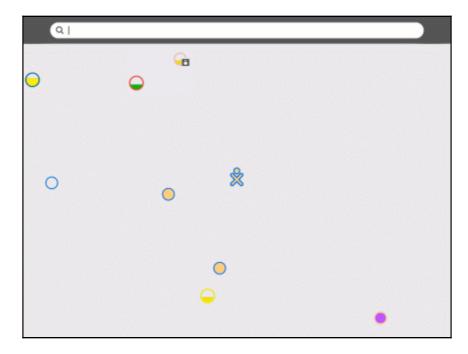
## **Connecting**

There are three ways to connect to the Internet:

- wireless access point (WiFi hotspot);
- "School Server" mesh network; or
- "simple" mesh network, which lets you collaborate directly with other XOs.

You make your connection from the Neighborhood view. Your current connection status is shown on the Home view. (The XO was designed for wireless access because in the developing world, wireless is actually the fastest, most reliable, and least expensive way to connect.)

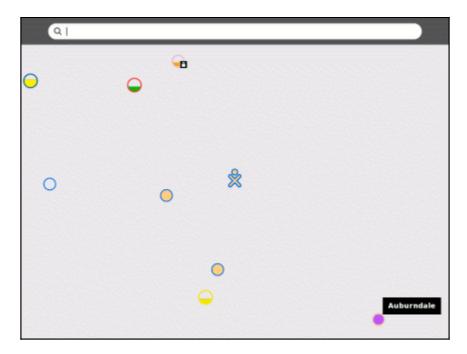
Step 1: Go to the Neighborhood view



Go to the Neighborhood view to connect to an access point. The Neighborhood view is accessed by pressing the round key with eight dots, found in the upper-left corner of the keyboard.



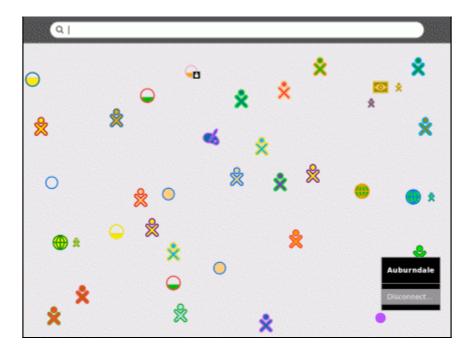
Step 2: Choose an access point



Networks (access points) are represented by circles on the Neighborhood view. Networks can be identified by hovering over the circles: an access point is identified by its name (ESSID); a mesh-portal point is identified by its channel number (1, 6, or 11). You can also search for an access point by name in the search bar at the top of the page.

Signal strength is indicated by the fill-level of the circle. The color of the circle is based upon the name of the access point. Networks that are locked are identified by a badge.

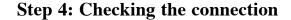


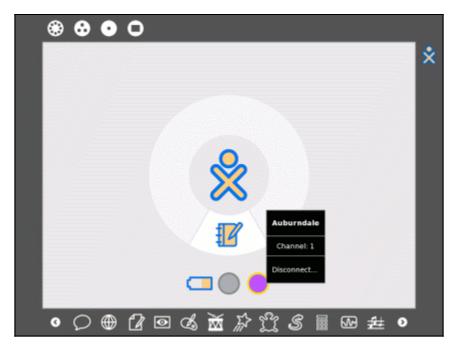


To activate your network connection, click once inside the circle that corresponds to your chosen access point. (To "click", press once on the left-hand touchpad button—the button with the× symbol at the front of the touchpad.) While the XO is trying to establish the connection, the inside of the circle will blink. Once the connection is established, the outside of the circle will turn white. If for some reason the connection failed, the circle will stop blinking. Sometimes it is necessary to try several times before the connection is established.

If the access point requires a key, you will be prompted. Note that different types of access points require different types of keys: be sure to select the correct type from the pull-down menu that is presented. Some access points (such as the Apple Extreme®) will only work with a hexidecimal value. If you have a password or passphrase, go to Hex Converter to get the hex key. Also, with the Apple Extreme you need to set "shared key". Most other access points prefer the "open key" setting when using WEP.

Currently, we do not support WPA-enabled WiFi access points; we anticipate including WPA support in early 2008.





Go to the Home View—by using the key with one circle found in the upper-left corner of the keyboard—to check your connection. By hovering over the circle icon, you will find details about your connection status.

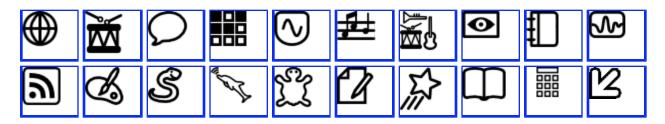


If you don't specify a network, the XO will attempt to join a simple mesh network, enabling you to collaborate with other XOs, but not access the Internet.

## For more information about connecting...

For more information about connecting, please see the Support page in our wiki.									

### **Activities**



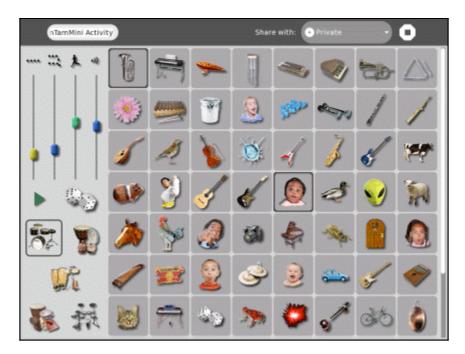
The XO laptop runs on Linux, a free and open-source operating system. OLPC's commitment to software freedom gives children the opportunity to use their laptops on their own terms. Children and teachers have the freedom to reshape, reinvent, and reapply their software, hardware, and content. There is even a button located on the keyboard that allows children to view the programming behind many applications. The XO laptop's revolutionary interface, Sugar, also promotes collaborative learning.

#### **Browse**



Browse is a simple Web application that allows children to access and search the Internet and share bookmarks among their friends. (See the Browse page in the wiki for more information.)

#### **TamTamMini**



Simple enough to be used by even the youngest ages, TamTam Mini is a fun, powerful way to perform music and play instruments. (See the TamTam page in the wiki for more information.)

#### Chat



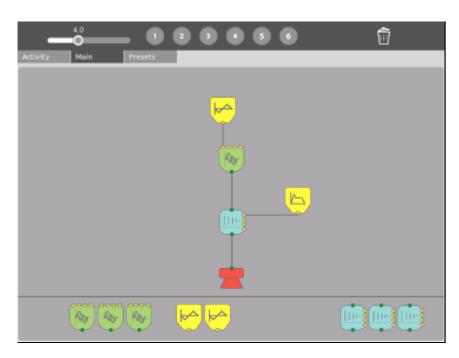
The Chat activity provides a simple environment for discussion, whether it is between two individuals or an entire classroom. (See the Chat page in the wiki for more information.)

#### Memorize



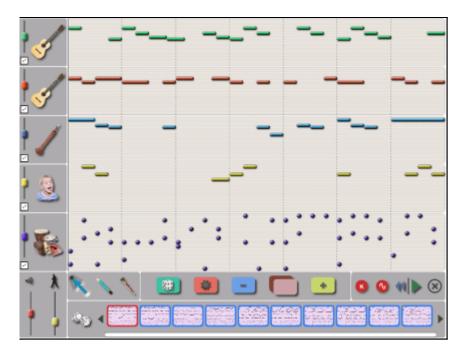
Memorize is the classic memory game of finding and matching pairs with a twist: a pair can consist of any multimedia object, such as images, sounds and text. The memory game allows children to play existing games as well as create new ones themselves. (See the Memorize page in the wiki for more information.)

### **SynthLab**



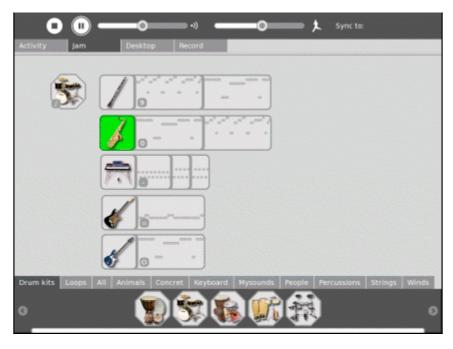
Designed for older children who are ready to venture into more sophisticated sound design, SynthLab is a mini-lab for acoustic- and electronic-circuit construction. (See the TamTam page in the wiki for more information.)

#### **TamTamEdit**



TamTam Edit is an intuitive environment for composing music. Children can create, modify, and organize notes on virtual "tracks", which allow for virtually limitless variations in musical styles. (See the TamTam page in the wiki for more information.)

### **TamTamJam**



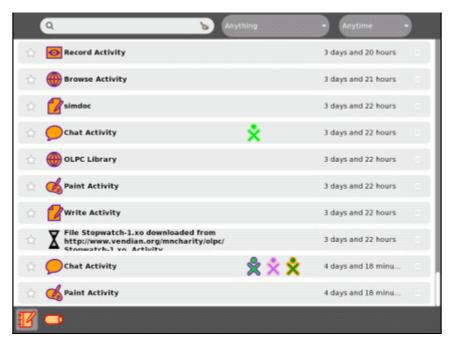
TamTam Jam is a fun, powerful way to perform music, play multiple instruments, and collaborate musically with other children. (See the TamTam page in the wiki for more information.)

#### Record



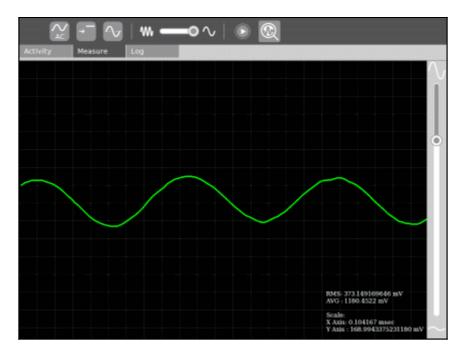
The Record activity provides a simple way for children to take pictures, view slideshows, and record videc and audio—all content that can be shared via the mesh network. (See the Record page in the wiki for more information.)

#### The Journal



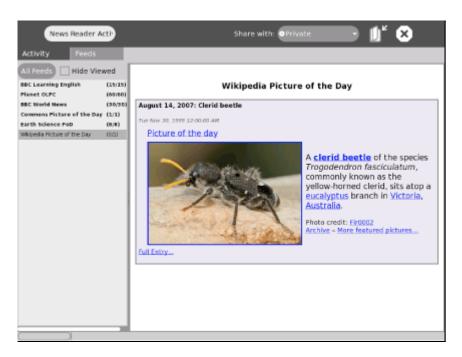
The Journal activity is an automated diary of everything a child does with his or her laptop. The Journal can be used by children to organize work or revisit a past project, and by teachers and parents to assess a child's progress. (See the Journal page in the wiki for more information.)

#### **MEASURE**



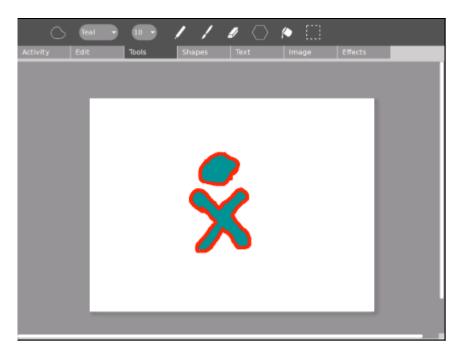
Measure is a tool that allows children to explore and learn by connecting and observing physical phenomena and real-world events. With it, children can measure and log data and create graphs. (See the Measure page in the wiki for more information.)

#### NewsReader



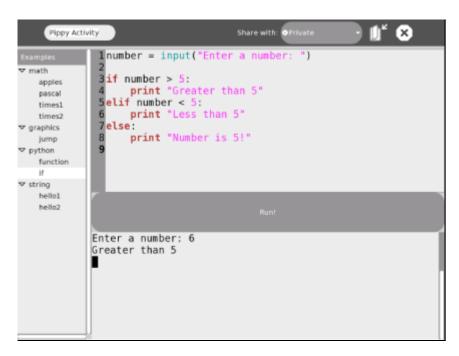
The NewsReader activity provides an interface for viewing news (RSS) feeds. (See the News Reader page in the wiki for more information.)

#### **Draw**



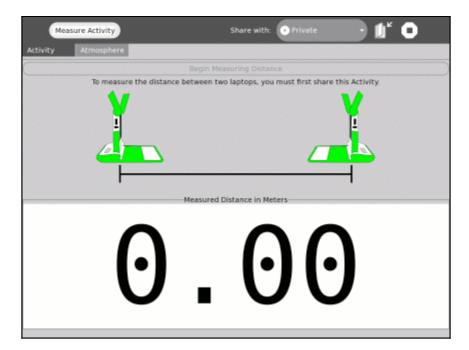
The Draw activity provides a canvas for a child or a group of children to express themselves creatively. Children can draw free-form images with a paintbrush and pencil, and use the dedicated toolbar to play and experiment with shapes. Text support, image import functionality, and an interactive placement system give children limitless ways to explore their creativity. (See the Draw page in the wiki for more information.)

### **Pippy**



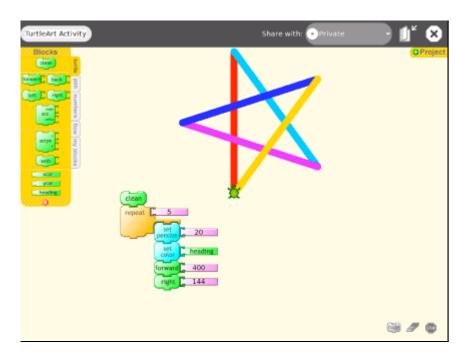
Pippy is a simple and fun introduction to programming in Python, the dynamic programming language underlying much of the software on the laptop. (See the Pippy page in the wiki for more information.)

#### **Distance**



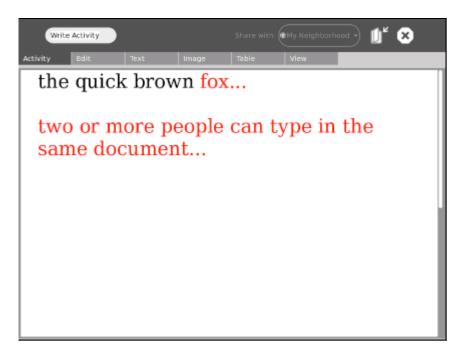
You can measure the distance between two laptops by measuring the length of time it takes for sound to travel between them. Along with the measure and record activities, there are many ways to use the laptop to explore the physical environment. (See the Distance page in the wiki for more information.)

#### **Turtle Art**



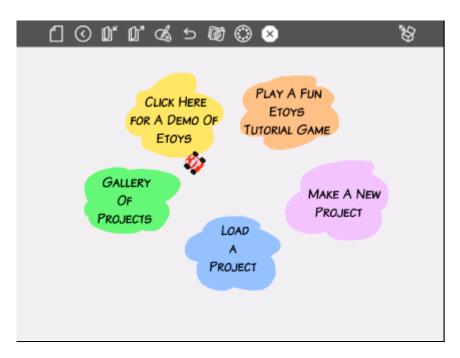
Turtle Art lets children program a Logo "turtle" to draw colorful and complex artwork. Simple programming elements easily snap together, allowing children to bring their art to life. (See the Turtle Art page in the wiki for more information.)

#### Write



Write is a basic text editing application featuring straightforward tools and a simple interface. It provides ar easy way for children to write a story, craft a poem, or complete an essay, as well as more advanced features like image insertion, table creation, and layout operations. It also features collaborative real-time editing, so a group of children can work together to edit text easily and seamlessly. (See the Write page in the wiki for more information.)

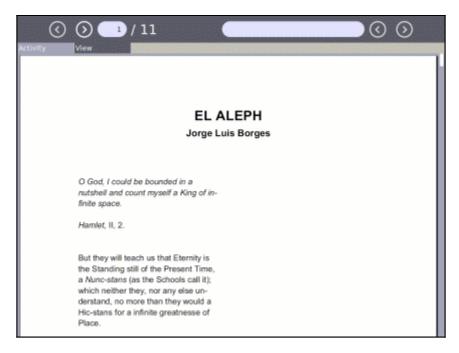
### **Etoys**



Etoys is a media-rich authoring system aimed at helping children learn by doing. They can explore their ideas by creating models, simulations, and games complete with text, graphics, sound, and video. Children can also share desktops with other Etoys users in real time, encouraging immersive mentoring and play. Etoys has a worldwide community of users and developers who are working to create content, curriculum,

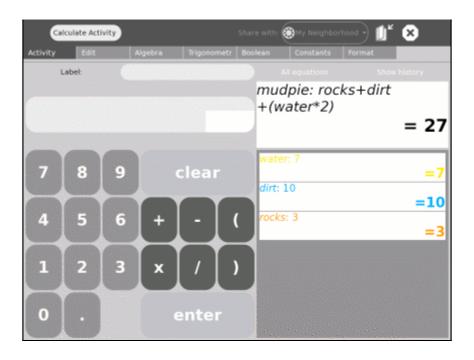
and examples. (See the EToys page in the wiki for more information.)

#### Read an eBook



The laptop has a built-in eBook reader: the display rotates 180 degrees around and folds down on the keyboard, which enables you to hold the laptop like a book to read. The screen folds over the keyboard and the screen rotates, enabling you to read a book while holding the handle. Read your favorite book on the laptop while sitting outdoors in the sunlight. (See the Read page in the wiki for more information.)

#### Calculate



Calculate provides a generic calculator with a simple, straightforward interface. It is designed to be intuitive and readable enough for even the youngest children to use, while also supporting more complicated mathematics. (See the Calculate page in the wiki for more information.)

#### **Downloads**



Along with the applications built into the XO laptop is an ever-growing array of downloadable content and built-in access to popular Web-based applications. This includes Google applications, SimCity, GCompris (a suite of award-winning educational software for children), and hundreds of other applications. There are currently thousands of software developers around the world developing content for the XO. For more information, visit <a href="http://wiki.laptop.org/go/Activities">http://wiki.laptop.org/go/Activities</a>.

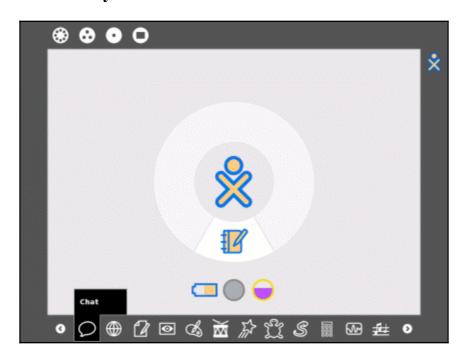
To download and install a new activity:

- (1) start the Browse activity on your XO;
- (2) goto http://wiki.laptop.org/go/Activities webpage;
- (3) click on the .xo bundle next to the word **Download:**, e.g., click on **Implode**.xo to download Implode;
- (4) open the Journal activity on your XO;
- (5) launch the downloaded activity from the Journal entry; the new activity should both launch and install on your taskbar.

## **Inviting**

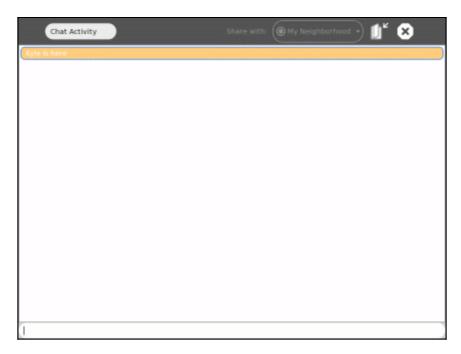
A basic premise of the XO is that learning happens through collaborating with others. One way to start a collaboration is to send an invitation to others.

Step 1: Launch an activity



Before you issue an invitation, you should launch an activity—Chat in this example—by clicking on the taskbar icon.

**Step 2: Leaving Chat** 

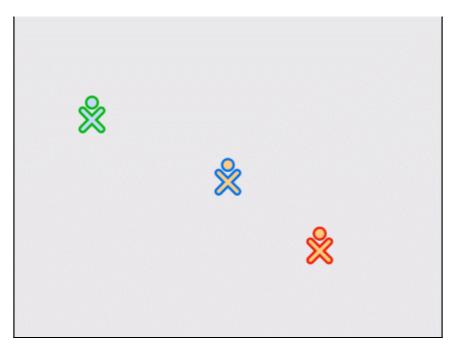


You'll have go to either the Friends view or the Neighborhood view to issue invitations.



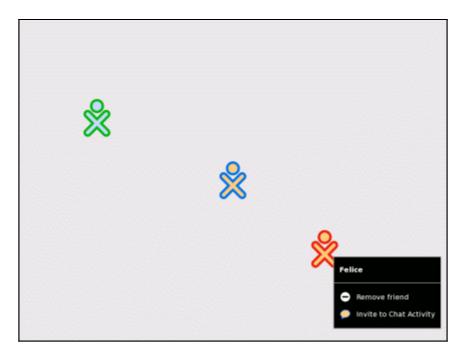


Step 3: Find a friend



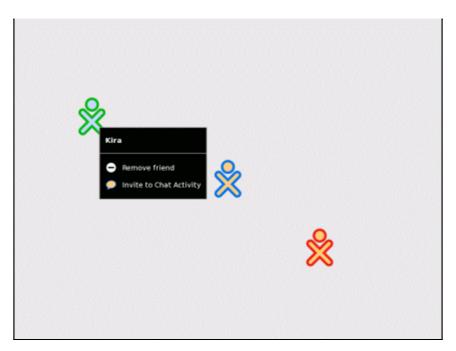
In this example, we use the Friends view.

Step 4: Invite a friend



Hovering over a friend's icon will bring up the invitation menu. Note that it says "Invite to Chat Activity", since Chat is your currently selected activity.

Step 5: Invite another friend



Most actvities let you invite more than one friend to participate.

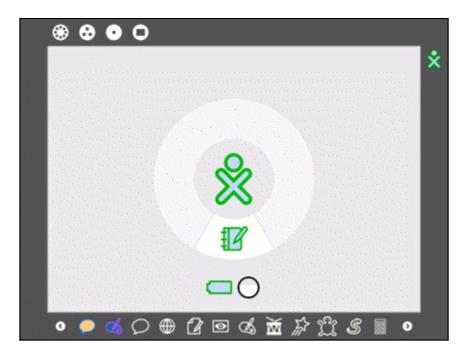
Step 6: Receiving the invitation



Your friends receive an invitation on their activity taskbars (found on the Frame). In the figure, see the second Chat icon (in your colors, since you are the one who sent the invitation).

Your friends accept the invitation by clicking on these colored Chat icons on their taskbars.

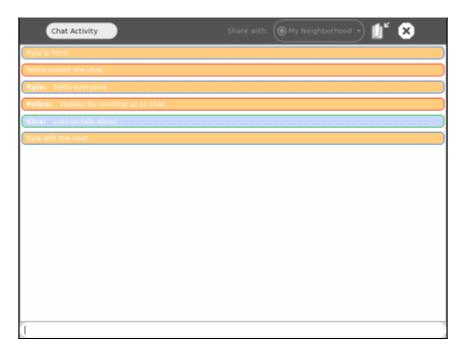
**Step 7: Multiple invitations** 

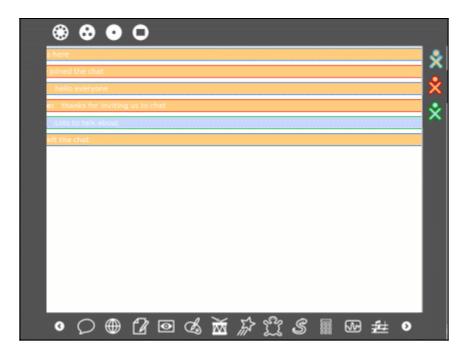


You can have more than one invitation pending.

You need not accept an invitation.

**Step 8: Working together** 



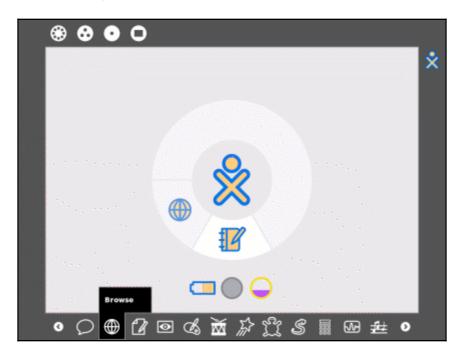


Once the invitations have been accepted, the shared activity is joined. (Note that the icons representing everyone in the Chat appear on the Frame.)

## **Sharing**

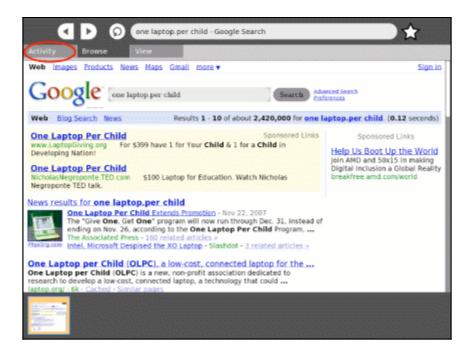
From the mesh view, you see other XOs with whom you can share documents and activities. (Activities and documents being shared by others show up as icons and network access points are represented by circles.)

Step 1: Launch an activity



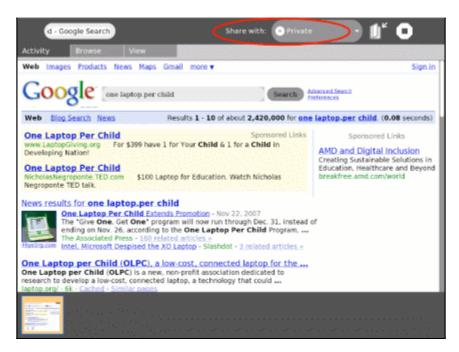
Before you share, you should launch an activity—in this case Browse—by clicking on the taskbar icon.

**Step 2: Select the Activity Tab** 



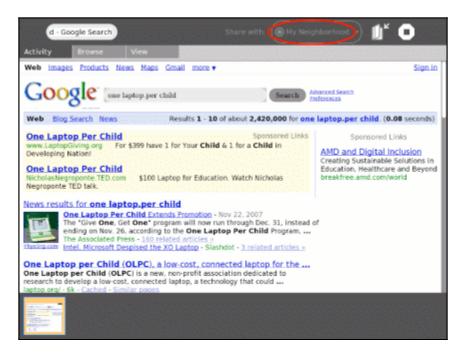
The sharing menu is on the Activity Tab.

## Step 3: Share with Neighborhood



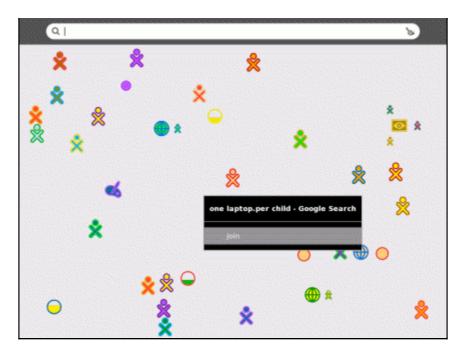
Select "share with neighborhood" on the pull-down menu.

### **Step 4: Sharing**



Once "share with neighborhood" is selected, you are sharing.

**Step 5: The mesh view** 



Your Browse session will appear to *everyone* on the mesh view.

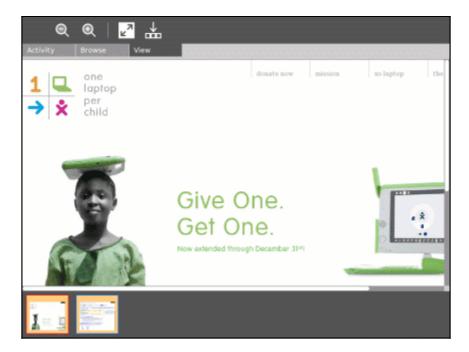
Others can join your Browse session clicking on the browse icon in the mesh view.

### **Step 6: Sharing bookmarks**



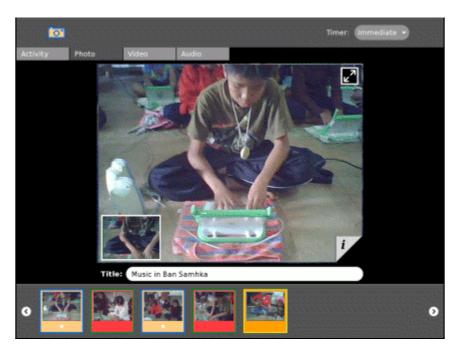
Browse shares by sharing bookmarks. Whenever anyone bookmarks a page in the shared session, everyone sees the bookmark in their browser tray. (Note that you create a bookmark by clicking on the star in the Browse menu—see Step 2 above.)

Step 7: Following a shared bookmarks



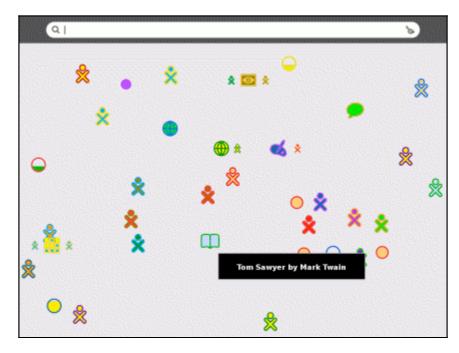
The shared bookmarks are clickable, hence everyone can surf the web together.

## **Sharing pictures**



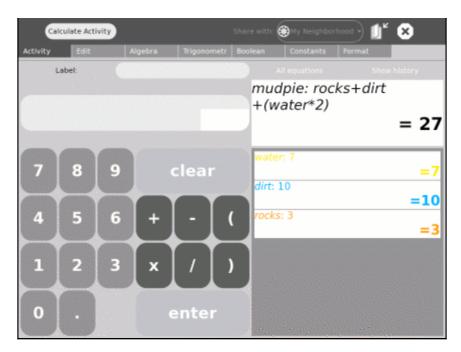
The record activity lets you share pictures as you take them.

## **Sharing books**



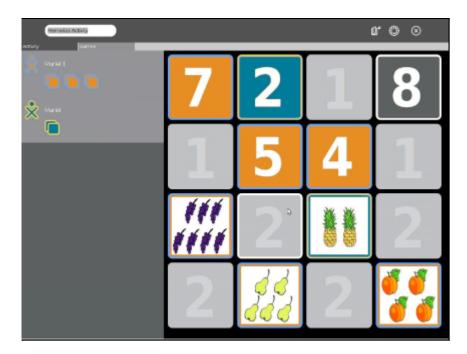
The read activity lets you share books on the mesh.

## **Sharing equations**



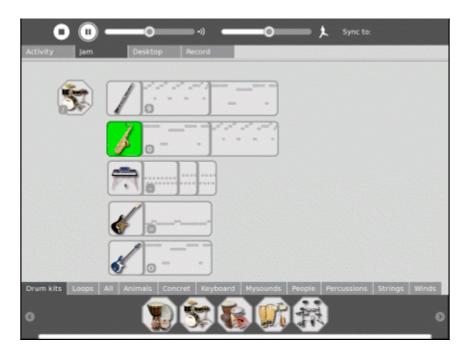
The calcualte activity lets you share variables and equations.

# **Sharing fun**



Most games have multiplayer modes that are played together over the mesh.

# **Sharing music**



## The Journal

The Journal activity is an automated diary of everything a child does with his or her laptop. The Journal can be used by children to organize work or revisit a past project, and by teachers and parents to assess a child's progress.

The Journal is also used to access external media (USB sticks, etc.); delete files; and access the backup system (for those of you connected to a School Server).

#### The Journal features



The Journal keeps a record of all of your activities and the things your create, e.g., photos, drawing, writing, etc. You can search for individual items in your Journal or sort the entries by type or date. You can also click on an entry to get a detailed view. Finally, you can resume an activity by clicking on the small gray icon on the far right of the entry.

## **USB** storage devices



Clicking on the USB icon shows the content of the device as Journal entries. Journal entries can be "dragged" onto the USB device and objects on the USB device can be "dragged" into the Journal.

# Removing USB storage devices



Hovering over the USB icon brings up an option to unmount the device.

## **Ebook mode**

The XO laptop transforms into an ebook.



Begin by positioning the screen vertically (at a right angle to the base).









Rotate the display until the screen is facing away from the keyboard.







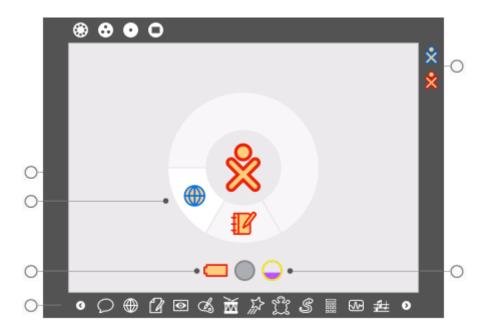
Fold the display back down onto the keyboard.

The game controllers can be used to scroll the display

To maximize battery life, turn the backlight off by pressing the lower-brightness key 4–5 times before entering ebook mode. (To restore the backlight, press the raise-brightness key 4–5 times.)

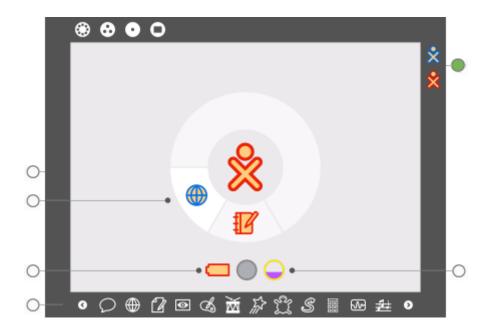


You access the Home view using this icon/key.



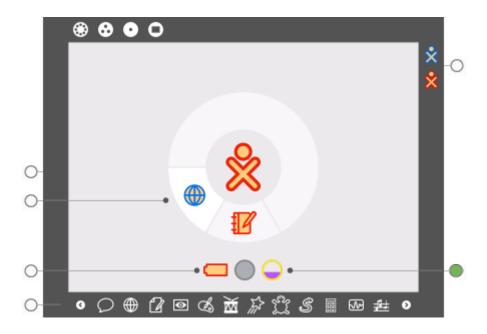
#### Home view

The Home view is used for launching activities and accessing the Journal. (Mouse over the circles in the figure above for more detailed information about the Home view.)



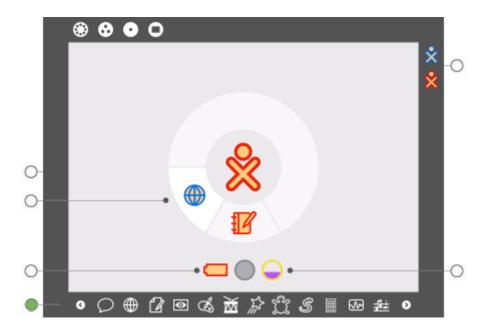
## **Friends**

The XO icons of your current collaborators appear on the right-hand edge of the Frame.



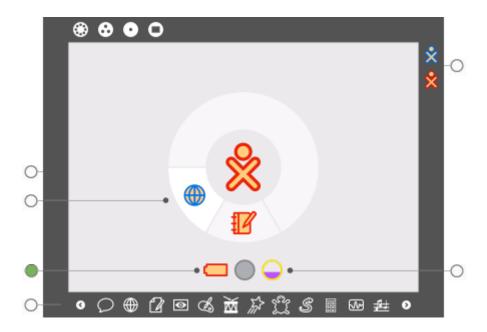
#### **Network status**

The status of your network connection is shown on the Home view. One circle indicates whether or not you are connected to the mesh (enabling collaboration without Internet access). A second circle indicates whether or not you have connected to a WiFi hotspot. More details are revealed when you hover over the icons.



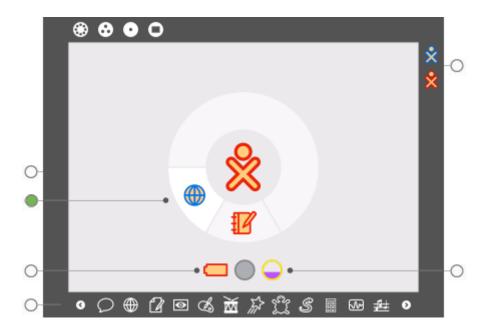
### Activity taskbar

Activities are found on a taskbar at the bottom of the Frame. Clicking on an activity icon will launch that activity (causing it to appear in the circle). Invitations to participate in collaborative activities also appear on the taskbar. To scroll the taskbar, use the left and right arrows on either end of the Frame.



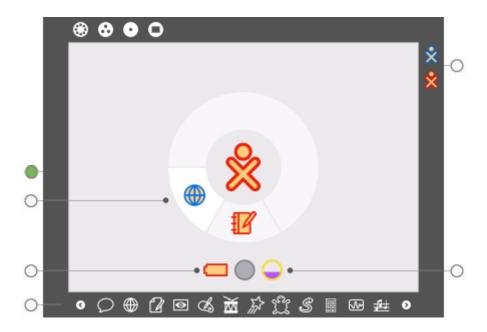
## **Battery status**

The battery status is shown on the Home view. Hovering over the battery icon reveals details about the battery status.



### **Activity Circle**

Open activities are placed on the Activity circle. (Take care not to fill the circle.) You resume or stop activities by selecting from a menu that appears when you hover over the activity icon. The Journal is always available at the bottom of the circle.

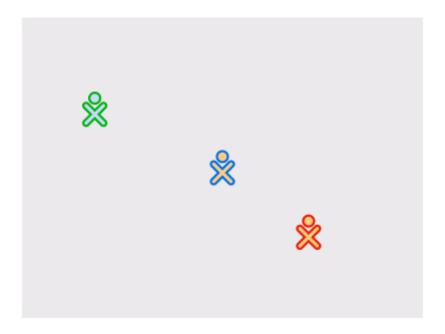


## Clipboard

The left-hand edge of the Frame serves as a clipboard. Items such as images and text can be dragged to and from the clipboard from and to activities.



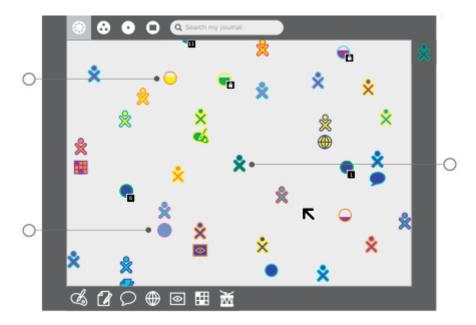
You access the Friends view using this icon/key.



The Friends view shows the child, their friends, and their activities, such as chat or a shared project. Every child is represented by a different color.

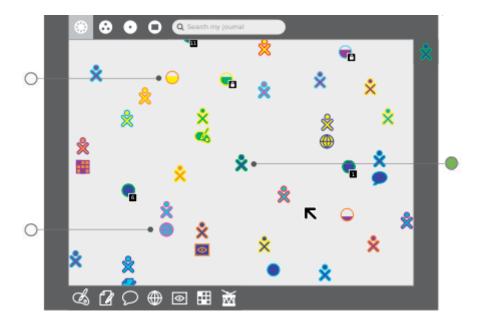


You access the Neighborhood view using this icon/key.



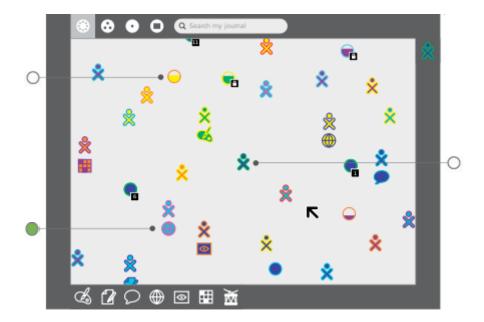
### Neighborhood view

The Neighborhood view is used for connecting to the Internet and collaborating with others. (Mouse over the circles in the figure above for more detailed information about the Neighborhood view.)



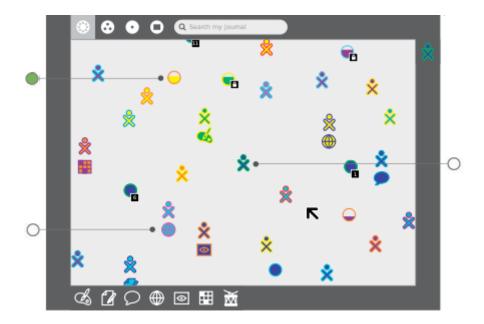
### **XO** icons

Other XO laptops appear in the Neighborhood view. By hovering over an XO icon, you can discover the nickname of that person and can invite them to be a friend or join you in a collaboration.



## **Shared activities**

Activities that are being shared appear as icons in the Neighborhood view. By clicking on the icon, you can join the activity.

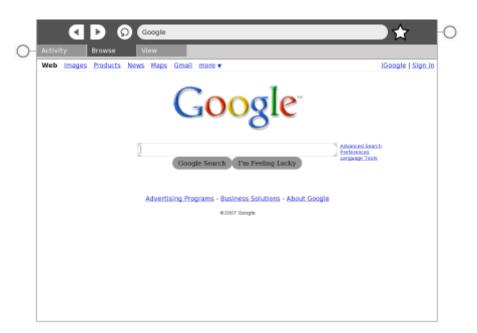


#### **Access points**

WiFi hotspots (Internet access points) are displayed as circles in the Neighborhood view. If you hover over a circle, the name of the access point (ESSID) is displayed. You connect to a hotspot clicking once in the circle; the interior of the circle will blink while it is trying to connect. Once you are connected, the outside of the circle will turn white. You may be prompted to enter a key, if it is required by your access point. To disconnect, simply choose that option from the menu when you hover over the circle.

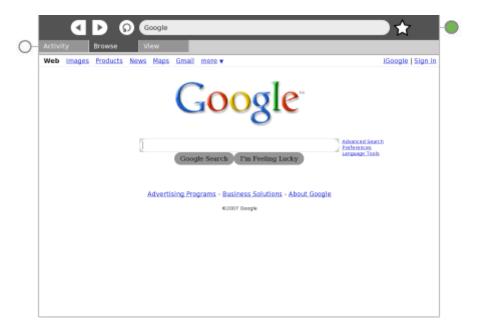


You access the Activity view using this icon/key.



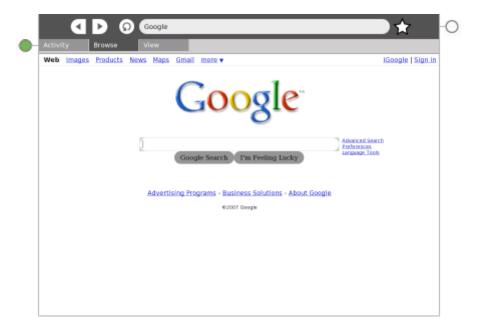
### **Activity view**

The Activity view displays the particular activity, or application, that a child is currently working within, such as Write or Draw. (Mouse over the circles in the figure above for more detailed information about the Activity view.)



## **Activity Tabs**

Some activities use tabs to organize additional menus. Selecting a tab brings up a logical subset of the available actions.



### Menu bar

At the top of every activity is a menu of actions.



### **Features**

The XO laptop has built-in functionality for still and video photography, voice recording, and game playing. (Mouse over the circles in the figure above for more detailed information about XO features.)



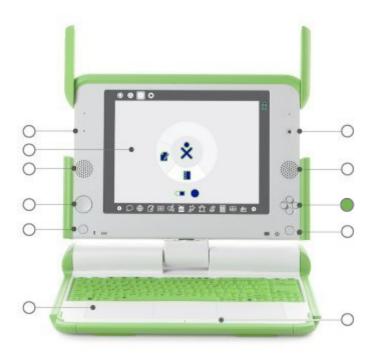
### **Built-in camera**

The XO laptop has a built-in color camera to allow for still photography and video recording. As a privacy measure, there is an LED above the camera that lights up whenever the camera is on.



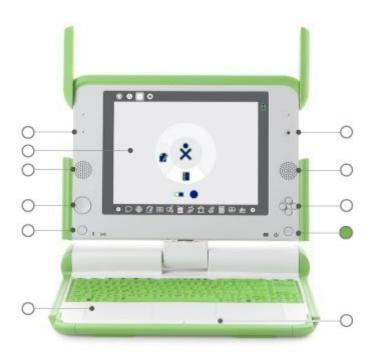
## **Built-in speakers**

Internal stereo speakers and an amplifier provide a way for children to play music, videos, and anything they have recorded themselves. There is also a jack for external headphones or speakers.



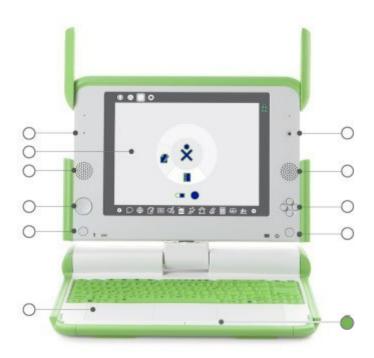
#### **Game controller buttons**

The game controller buttons can be used when the screen is folded down into e-book mode, creating a self-contained game player. The buttons are labelled with a circle, a square, a check, and anx; these buttons are often used by actvities, e.g., the circle button can be used as the shutter for the camera in the Record actvity.



# Power button, indicators

From left to right: the battery-level indicator; the power indicator; and the power button



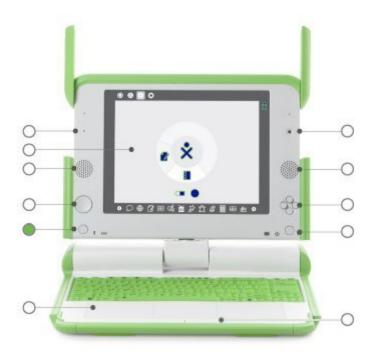
### **Touchpad buttons**

There are two touchpad buttons: one labelled with a  $\times$  and the other with a circle. Whenever you are asked to "click", you should tap the left-hand button ( $\times$ ) once. In the future, the right-hand button (o) will be used to bring up hover menus instantly. (We've tried to eliminate the need to "double click" throughout the interface.)



# Touchpad

The XO has a dual-mode touchpad. The center portion is capacitive: it is used to move the cursor as you move your finger. The entire surface is also resistive: in the future, activities can be used with a stylus.



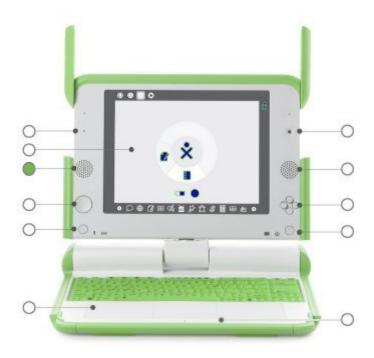
# **Screen rotation**

A button on the XO laptop's display frame changes the orientation of the screen, so it can be viewed right-side-up from any direction.



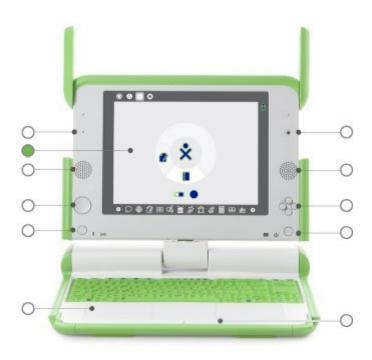
## Game pad

There are two sets of four-direction cursor-control keys. These keys act as game controllers that can be used when the screen is folded down into e-book mode, creating a self-contained game player.



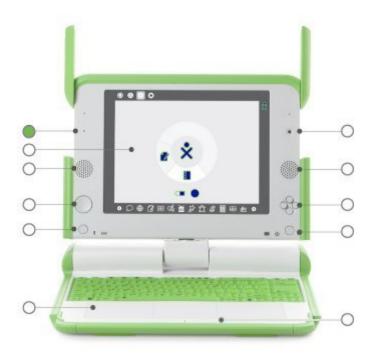
## **Built-in speakers**

Internal stereo speakers and an amplifier provide a way for children to play music, videos, and anything they have recorded themselves. There's also a jack for external headphones or speakers.



### **Backlit screen**

The display functions in a full-color mode similar to other laptop displays and in an ultra-low-power, ultra-high-resolution, black-and-white mode that is readable in direct sunlight.



## **Built-in microphone**

There is both a built-in microphone and an external microphone jack, which supports both AC and DC sources. As a privacy measure, there is an LED above the microphone that lights up whenever it is in use.



# SD memory-card slot

There is a slot underneath the display that accepts SD memory cards for photos, video, and other content. Rotate the display so that the left-hand edge is over the keyboard—the slot will be accessible from below.



# Rechargeable battery

Since many children in the developing world live "off the grid" (in places with poor or non-existent power infrastructure), the XO laptop is designed to be extremely power efficient.



# Power jack

The XO comes with a power cord that can be plugged into any 110-to-240-volt AC outlet for charging. The power jack also accepts DC power from a solar panel for charging the XO laptop's battery.



# **USB/memory ports**

The XO laptop features three external USB ports to support a variety of plug-in peripherals (one seen here and two others under the other "ear").



## External headphones and microphone jacks

Along with built-in speakers and microphone, the XO laptop features jacks for external headphones and ar external microphone.



#### **Antennae ears**

When the wireless antennae "ears" are rotated up, they are vastly superior to those of conventional laptops; when down, they keep dirt out of the connectors and act as a latching mechanism.



# Search key

The search key takes you directly to the Journal.



# View keys

The four view keys, from left to right, take you to the Neighborhood view, the Friends view, the Home view, and the Activity view.



# Programmable slider

The slider keys are reserved for a future feature.



## **Brightness controls**

The brightness keys lower and raise the brightness of the screen backlight. (To turn the backlight off completely may take 4-5 button presses.)



### Volume controls

The volume keys lower and raise the audio level.



# **Bulletin board key**

The bulletin board key is reserved for a future feature.



## Frame key

The frame key toggles the presence of the Frame on the screen. (The Frame is the black border around the screen that holds the activity taskbar, clipboard, buddy list, etc.)



## Erase key

The erase key deletes the character behind the cursor (backspace). Fn-erase deletes the key under the cursor (delete)



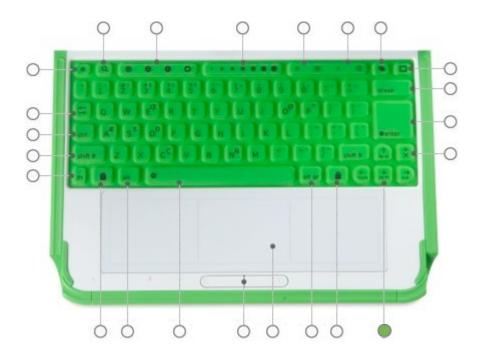
## **Enter key**

The enter key—in addition to its standard use—is used in combination with modifier keys (e.g., Alt-enter toggles full-screen mode).



### Language key

The language key is found on keyboards layouts that combine Latin and non-Latin scripts. It toggles between scripts, so, for example, one can switch between typing in English and Hindi with a single keystroke. (On Latin-only keyboards, the language key has been replaced by  $a \times and \div key$ .)



## Arrow keys

The arrow keys are used for navigation; combined with the function key (Fn), they are used for page up, page down, home, and end.



# Grab keys

The grab keys are reserved for a future feature.



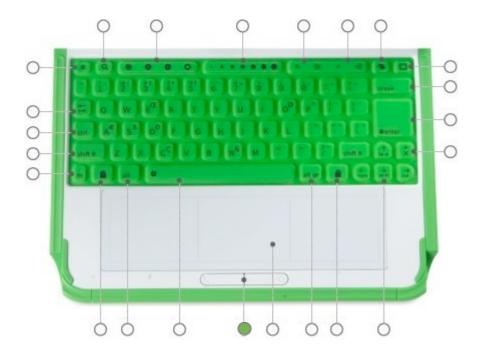
### Alt Gr key

The alt graphics key is used in combination with other keys as a modifier, most commonly to select an alternative letter or generate an accented character. The details of this functionality varies from keyboard layout to keyboard layout: for example, on the US keyboard, AltGr-J generates a € (euro sign); typing the character "a" followed by AltGr-4 generates á.



## **Touchpad**

The XO has a dual-mode touchpad. The center portion is capacitive: it is used to move the cursor as you move your finger. The entire surface is also resistive: in the future, activities can be used with a stylus.



### **Touchpad buttons**

There are two touchpad buttons: one labelled with a  $\times$  and the other with a circle. Whenever you are asked to "click", you should tap the left-hand button ( $\times$ ) once. In the future, the right-hand button (o) will be used to bring up hover menus instantly. (We've tried to eliminate the need to "double click" throughout the interface.)



## Spacebar

The space key, when used in conjunction with the function key (Fn) invokes the system "view source" function in enabled activities.



## Alt key

The alt key is used in combination with other keys to issue commands (e.g., Alt-enter toggles full-screen mode; Alt-space toggles the tray visibility (works in Browse but not in Record).



# Grab keys

The grab keys are reserved for a future feature.



## Fn key

The function key is used in combination with other keys as a modifier (e.g., Fn-erase is delete; Fn-up arrow is page up).



## Shift key

The shift key is used in combination with other keys as a modifier, most commonly to shift between lowercase and uppercase in Latin-based alphabets.



## **Control key**

The control key is used in combinaton with other keys to issue commands (e.g., Ctrl-c is used to copy to the clipboard; Ctrl-v is used to paste from the clipboard).



## Tab key

The tab key is labeled with arrows pointing right and left. The tab key—in addition to its standard use—is used in combination with control and shift to cycle through open activities (Ctrl-Tab cycles forward through running activities).



## Escape key

The escape key is labeled with a white  $\times$  symbol on a black circle. The escape key is most commonly used in combination with the control key to quit activities (Ctrl-Esc).





### The battery

The XO can be hand charged via a crank, pedal or pull-cord—or recharged by a directly connected solar panel. (Mouse over the circles in the figure above for more detailed information about the XO battery.)



## **Battery**

The XO battery operates for up to 2,000 recharge cycles (four times the lifetime of a typical laptop battery) It is extremely efficient and contain no toxic heavy metals.



## **Battery latch**

Two latches hold the battery in place. The open position is towards the outside edge of the laptop. The right-hand latch is spring-loaded; it must be held open during battery insertion and removal. The left-hand latch should be slid into the lock position after battery insertion.



## **Inserting the battery**

The battery is inserted into the battery compartment by putting the rounded edge into the compartment first on the side nearest the handle. The latches should be pulled outward as the battery is inserted; as final step, push the latches inward.



## Model No. and Serial No.

The model number and serial number are on the sticker in the battery compartment. Safety certifications are also found there.



## **Battery latch**

Two latches hold the battery in place. The open position is towards the outside edge of the laptop. The right-hand latch is spring-loaded; it must be held open during battery insertion and removal. The left-hand latch should be slid into the lock position after battery insertion.

# Troubleshooting guide

#### **Troubleshooting Guide**

As a non-profit association, OLPC is unable to provide direct technical support. One goal of the project is that children will learn to troubleshoot the XO themselves and subsequently use their experiences to help others. This support process is already underway in our international deployments—we encourage you to participate in this support network.

Information can be found online: on our Support wiki; the laptop.org website; email lists; and IRC channels.

If you have a question about your XO that is not addressed in the list of questions below please goto our Support FAQ to see a rapidly expanding knowledge base; if you are unable to find an answer online, please send us an email at help at laptop.org.

#### What if my laptop does not turn on?

Is the power adapter plugged in both to the wall and to the laptop?



Is the battery light illuminated? (The battery light is in the shape of a battery; it is to the lower-right of the display. It should be on—green or orange—whenever the laptop is plugged in.)



Did you press the power button? (The power button is in the lower-right corner of the display unit.) Note that you need only press the power button; you do not need to hold it down.



Is the power light illuminated? (The power light to the right of the battery light, to the lower right of the display. The power light should come on—green—after you press the power button.)

#### How do I turn off my laptop?

You turn off the laptop by holding down the power button for 10 seconds (or you can use the hover menu on the Home view—select the shutdown option).

### What if my battery does not work?

Is it properly inserted into the laptop? Did you allow for a full charge?

### What does the battery indicator-light color mean?

green means the laptop is plugged in and the battery is fully charged;

yellow/orange means the laptop is plugged in and the battery is charging;

no light when the laptop is powered on means it is running on battery power;

no light when the laptop is powered off means the battery is *not* recharging;

red means the battery is low; it should be recharged.

#### How long should a fully charged battery last?

With standard operation, the battery should last approximately 3–5 hours. Certain applications, such as video, may reduce overall battery performance. Turning the backlight off saves battery power. (Future software releases are expected to improve battery life.)

#### What if I cannot get online?

Do you have wireless internet/WiFi nearby?

Is your WiFi access point locked? If yes, you must have the password in order to connect.

Have you connected to your WiFi access point?

You need to go to the Neighborhood view and click on the circle that represents your WiFi access point (the name of the access point is displayed when the cursor is placed over a circle). Once you have single-clicked on the circle representing your access point, the center should blink. When you are connected, the rim of the circle turns white; the center blinking stops. If your access point is locked, you will be prompted to insert a key. (Be sure to select the proper key format for your access point from the pull-down menu.) You can confirm that you are connected by returning to the Home view and hovering over the network status circles. (Please see the Connecting Guide.)

For more information about connecting, please see the Support page in our wiki.

### How do I save my work?

Your work is automatically saved for you in the Journal.

### How can I backup my work?

You can backup your work onto a USB storage device. When you insert a USB storage device into any one of the three USB slots, it is automatically mounted and appears as an icon in the Journal (at the bottom of the screen). You can drag and drop Journal entries onto the icon in order to transfer them to the USB device. When you are finished, use the hover menu to unmount the device.

#### How can I add new programs and content to the laptop?

OLPC maintains an Activities page on our wiki with links to many additional programs for your XO. You can install new programs directly from the web browser. Activities are "bundled" in files with a .xo suffix. Clicking on a bundle will cause it to download from the Internet into the Journal. Launching the bundled activity from the Journal will install it on the taskbar. Similarly, you can download content, such as PDF or DOC files, videos, and music into the Journal.

You can also install software and content from an USB storage device from within the Journal.

Finally, you can install software and content from the Terminal activity, which gives you access to the Linux command shell.

#### How can I add proprietary software such as Adobe Flash® to my XO?

OLPC advocates the use of free and open source software; however, there are situations where one may want to use a proprietary alternative. General instructions on how to load many popular proprietary packages can be found in our wiki. Additional information about software and system customization can be found here.

The laptop comes preinstalled with Gnash, a non-proprietary Flash player. If you would like to install Adobe Flash, please refer to these instructions.

#### How do I upgrade the software on my laptop?

Your laptop is programmed to automatically check for software updates whenever you connect to the Internet. You can turn this feature off from the Sugar Control Panel (see below).

#### How do I change the color of my XO? How do I change my nickname?

There are many user settings that can be changed from the Sugar Control Panel, including your colors and nickname. Instructions can be found in the wiki.

#### Are there any keyboard shortcuts for navigating the user interface?

The system-wide keyboard shortcuts are listed in our wiki. There are additional shortcuts assigned by individual activities that are documented on their pages in the wiki.

### I am an educator. Is there more information about how I can participate?

We have numerous pages in our wiki dedicated to our educational mission. A good starting point is here.

### I am a software developer. Is there more information about how I can participate?

We have numerous pages in our wiki dedicated to software development. A good starting point is here.

#### How do I get a developer key for my laptop?

Please follow the instructions in the wiki for information about developer keys.

#### I would like access to the source code. Where do I go?

Source code unique to the project can be found in our git repository. Additional source code can be found at the Red Hat Fedora source repository.

#### Release notes

There are several known shortcomings of the "Ship.2" software release:

- (1) there is no support for WPA-enabled WiFi access points;
- (2) there is no printing support;
- (3) suspend/resume support is incomplete;
- (4) the cursor is not displayed in "rich text" fields in the browser;
- (5) the Browse activity cannot play video or audio made by the Record activity; and
- (6) the cursor sometime jumps erratically due to a miscalibration error—you can recalibrate the touchpad by doing the "four-finger salute".

Additional details are available in the Release Notes.

(Please note that most of these problems will be addressed in our next software release, scheduled for early 2008. Thank you for your patience. Specificially in regard to printing, the reason it has not been a high priority is that in an environmentally conscious world, we are trying to minimize the dependency on consumables such as paper.)

#### How do I report a bug?

We are very interested in bug reports. Please report bugs by sending email tobugs at laptop.org. Developers, please continue to file bugs in our tracking system.

We are also interested in your suggestions for enhancements to our system.

Community input and collaboration is vital to the success of OLPC. Thank you for your participation.