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Special Needs Tech News

A newsletter celebrating enabling technology, the people who use it, and the developers that make it possible.

EDITOR'S CORNER

If you're looking for a huge educational technology conference to attend at the end of June, consider making your way to Seattle for the National Educational Computing Conference (NECC). To learn more, read the article about NECC 2003 on page 3. This issue of *Special Needs Tech News* also takes a look at the accessibility category results for the "Trophées du Libre," the first international free software competition. With funding cuts in a number of educational jurisdictions, it will be interesting to follow the development and deployment of Open Source software in both the public and private sectors. A new study commissioned by the government of Canada on the potential of Open Source software is now underway. *Open Source Business Opportunities for Canada's Information and Communications Technology Sector (ICT) - A Collaborative Fact Finding Study* involves a survey about the use of Open Source. People in the education field are invited to participate. A questionnaire can be found through the project's homepage at http://www.e-cology.ca/canfloss/canfloss_en.html

Please feel free to make complete copies of this publication to share with others.

Send feedback to:

Janet Hopkins, ATP

at_consulting@canada.com

or

at_consultingbc@yahoo.ca

Phone (250) 828-1444

Fax (250) 828-1452

Mail: 2265 MacIntyre Place

Kamloops, BC V1S 1H7

Join the ATCanada Listserv

The ATCanada Listserv was initiated on Dec. 30, 2001. Educators and others can join this free discussion group to learn and exchange information on assistive technology issues. Join at: http://ca.groups.yahoo.com/group/ATCanada or http://ca.geocities.com/janethopkinsbc/

INSIDE

MOUSE TRACKS

WCD
Foundation for Education, Inc.

http://www.wcdfoundation.org

The mission of the WCD is to provide support to children and adults with disabilities and their families. Check out the Virtual WCD, a disability trade show accessible from anywhere.

The Alliance for Technology Access

http://www.ataccess.org/

Use the ATA Hub to locate assistive technology tools. There are many other resources on this Web site including resources devoted to assistive technology in K-12 schools. http://www.ataccess.org/resources/atk12/default.html

2003 CODIE Award Winner

http://www.siia.net/codies2003/winners.asp

Congratulations to Digital Frog International, Inc. (http://www.digitalfrog.com) on their 2003 CODIE Award. ***The Digital Field Trip to the Rainforest AT*** won this year's Best K-16 Educational Special Needs Solution category.

"Les Trophées du Libre" International Free Software Competition

http://www.tropheesdulibre.org/

The first international free software competition was held on May 23, 2003 in Soissons, France.

The GNOME Onscreen Keyboard (GOK) took first place in this category. Trophies were also awarded to Gnopernicus and KDE Accessibility.
Congratulations to the teams that have been supporting and working on these projects. Information about these Open Source software projects, obtained from the competition Web site, is included below:

ACCESSIBILITY CATEGORY

GOK (GNOME Onscreen Keyboard)

http://www.gok.ca

GOK provides people with significant physical impairments access to their UNIX graphical desktop, utilizing the GNOME Accessibility architecture in the GNOME 2 desktop. GOK will also work with Java applications that implement the Java Accessibility API, with Mozilla, and with OpenOffice (all of which support the GNOME accessibility architecture).
Functions: GOK provides a set of dynamically updated on-screen keyboards that provide users with an alternate way to interact with applications on their graphical UNIX desktop. These keyboards include an alphanumeric keyboard, as well as keyboards containing the contents of the menu bar, menus, and the toolbar of the application that has focus. GOK will also enumerate the UI widgets (for example in a dialog box) and present a keyboard containing those items. The alphanumeric keyboard provides word completion. The user interacts with these dynamic keyboards though specialized hardware: single switch devices for users who can manipulate some sort of latch using one of the muscle groups they can control (e.g. a check switch, or a button they press from their shoulder); head tracking devices which employ a camera to track a reflective dot on the user's forehead or glasses in order to capture mouse movement; or eyegaze technology where a camera tracks where the user's eye is looking. GOK is operated in one of four modes: in direct selection mode the user simply clicks on buttons on the keyboard with a mouse or other pointing device; in scanning and inverse scanning mode GOK highlights portions of the keyboard and the user presses their switch device when the portion containing the button they want to select is highlighted, and then GOK cycles through the individual buttons highlighting them in turn and the user presses the switch again when the button they

want to press is selected; finally in dwell selection mode, the user moves his head pointer or uses eye-gaze to simply look at the button he wants to select and GOK selects that button when the mouse has remained (dwelled) over it for the specified amount of time. In this way, even users with severe physical disabilities are able to enter text, select menu items, and interact with toolbars and dialog boxes - so long as they can at least move their eyes or twitch a muscle.

Gnopernicus

http://www.baum.ro/gnopernicus.html

Gnopernicus provides people with blindness or low-vision access to their UNIX graphical desktop, utilizing the GNOME Accessibility architecture in the GNOME 2 desktop. Gnopernicus will also work with Java applications that implement the Java Accessibility API, with Mozilla, and with OpenOffice (all of which support the GNOME Accessibility architecture).

Functions: Gnopernicus supports a variety of refreshible Braille displays, text-to-speech via the gnome-speech project, and magnification via the gnome-mag project. Gnopernicus provides a rich set of screen review functionality, as well as responding to a host of events in the graphical user interface (such as focus movement, text insertion caret movement, new windows appearing, etc.) and presenting the pertinent information to the user in Braille, speech, and magnification modalities.

KDE Accessibility

http://accessibility.kde.org

KDE Accessibility provides people with disabilities access to the KDE environment, its applications and computing (IT).

Functions: The KDE Accessibility package contains several softwares. ***KMag:*** a focus for people with low-vision; ***KMouseTool:*** is ergonomic software that clicks the mouse for people with physical impairments; ***KMouth:*** allows people that can't speak to manage the computer so it can speak for them; ***Speaker:*** "text-to-speech" tool to use with Konqueror or Kate. This project will be included in the next version of KDE (3.0.1) and will be packaged in all the distributions. Accessibility projects developed by Sun Microsystems (AT-SPI Gnome) are about to be implemented in KDE Accessibility. This architecture is already used in the OpenOffice, Java, Mozilla and Gnome project. Thanks to its newest concept, it allows the softwares to export information about their appearance and the control they use. This allows new tools to be developed in the way of making accessibility easier. Today, other functionalities are available for other Operating Systems. AT-SPI is becoming a revolutionary interface for accessibility and a lot of free softwares could use it. KDE Accessibility, as all KDE, will be translated in more than 50 languages and will be available with documentation for every tool. A document is about to be written to explain how to make KDE easier to use for people with significant physical impairments.

Source: Nominees list information, Les Trophées du Libre.

The National Educational Computing Conference (NECC)

http://www.neccsite.org

The National Educational Computing Conference (NECC) will be held in Seattle, WA this June 29 – July 2, 2003 at the Washington State Convention & Trade Center.

The largest computing conference of its kind in the world, NECC, presented by the International Society for Technology in Education (ISTE), is expected to draw approximately 16,000 visitors.

NECC is regarded as the premier educational computing conference attracting K—12 Teachers, Teacher Educators, Tech Coordinators, Library Media Specialists, Administrators, Policy Makers, Industry Reps, and Exhibitors.

NECC 2003: Visions & Reflections, will focus this year on issues of diversity, equity, and accountability. Over 450 educational hardware and software companies will offer more than 400 dynamic local and national speakers, demonstrations, discussions, workshops, Internet poster sessions and research papers. Educational decision makers and classroom teachers alike will be able to get hands-on experience with cutting-edge products for the K-16 community through conference exhibits and extended workshops.

This year's conference program includes new "Birds-of-a-Feather" sessions and a "Global Gallery," in addition to the keynote addresses, forums and symposia, student showcases, and numerous other conference offerings. Visit the NECC program page at http://center.uoregon.edu/NECC/NECC2003/presenters/program/

For attendees specifically interested in special needs issues and assistive technologies, the following companies, and others, will be attending this conference as exhibitors:

- IntelliTools
- Inspiration Software
- Lexia Learning Systems, Inc.
- AlphaSmart, Inc.
- Crick Software
- Curriculum Associates, Inc.

For a complete list of conference exhibitors, visit the NECC page http://center.uoregon.edu/NECC/NECC2003/presenters/exhibits/current_exhibitors.php

Because of the location of this year's conference, educators in the Northwest have a convenient opportunity to take part in this major technology event. People in British Columbia interested in attending the conference can drive to the site or opt for a Quick Shuttle bus service one way or return, Vancouver to Seattle. Find out about Quick Shuttle schedules and rates at www.quickcoach.com

Conference hotels are quickly becoming booked, however there are some reasonably priced accommodations within walking distance of the conference center or close to the Seattle free bus zone that can be reviewed and booked on-line at http://www.seeseattle.org/visitors/lodging/

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ASSISTIVE TECH EDUCATIONAL CONSULTING
at_consulting@canada.com
or
at_consultingbc@yahoo.ca