

4Kids.Org: topical, searchable, and safe Internet-based resource for children and youth

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Abstract:

4Kids.org is an online resource with an accompanying syndicated print publication created to promote safe access to websites and technology literacy. 4Kids.org, created by ALTEC at the University of Kansas in 1995, provides a variety of Internet-based activities as well as access to a database of websites reviewed for educational content, appropriateness, and commercial-free content. This review presents many 4Kids.org features while highlighting a resource designed to provide young people in grades K – 5 with a safe and successful Internet experience.

Introduction:

In 1995 the Internet was just beginning to be seen as a resource that would have a tremendous impact on business and education. Many commentators, as illustrated by the July 3, 1995, *Time* magazine cover article "On a Screen Near You: Cyberporn," were concerned about the negative effect this environment could have on children. 4Kids.org was created to provide youth, their parents (and grandparents) a portal, through print publications and a website, to many of the rich and exciting resources that were present and emerging on the Internet. The original intent of 4Kids.org was to encourage access to the many safe, interesting, and educationally valuable sites so that youth and their families would become analytical and knowledgeable users of the Internet.

Today over 90 percent of youth have access to the Internet, and social networks as well as mobile technologies are used to communicate with friends and search for resources and entertainment. (Lenhart, Madden, and Rainie, 2006). There are many online resources that continue to increase in number and popularity. From hidden advertisements to inappropriate content just a few links away, many websites that purport to be for children fail to provide a safe, secure environment, and while access to the Internet is certainly an asset to teaching and learning, it is necessary to be aware of potential risks. There continues to be a need for youth to exercise caution in their searching, build skills needed to recognize objectionable sites, and seek information on safe, commercial-free sites in order to become proficient consumers of information (*enGauge 21st Century Skills*, 2003). 4Kids.org continues to address this need.

What is 4Kids.org?

In the early 1990s educators at Advanced Learning Technologies in Education Consortium (ALTEC), a division of the Center for Research on Learning at the University of Kansas, created 4Kids.org as a print publication for national and international syndication in newspapers and as a website providing children,

youth, and their families with access to the increasing number of safe and educational sites on the Internet. The print version of 4kids.org continues to be funded through syndication. The Internet environment was funded from 1995 through 2005 by the federal Regional Technology in Education Consortium (RTEC) program. With over 45,000 visits a month, the ALTEC team (authors included) continues to support the online version through professional development and dissemination of other resources for K-12 education.

Since its inception in 1995, 4Kids.org has appeared in more than 500 weekly issues published in newspapers worldwide to promote use of the Internet and technology literacy. The database containing these website selections and reviews can be accessed online at <http://4kids.org/> in the "Back Issues" section. Every week, 4Kids.org features three websites carefully chosen by staff members. Sites are reviewed and selected for inclusion in the publication if determined to be educational, kid-friendly, and free of advertisements. Many of the featured sites are interactive and encourage learning through games, quizzes and online research activities.



Figure 1.4
Kids.org as it appears in weekly print syndicated publications.

In addition to the archive of print features, there are additional features which include a *Speak Out* section for youth to express opinions on current topics of

interest; an Internet hunt challenge; educational games; an *Ask Amy* feature; and a searchable database of vetted and reviewed sites called *Cool Spots*.

Youth Voice

4Kids.org provides two features that encourage youth to ask questions and comment on their experiences. These include *Ask Amy* and *Speak Out*.

Ask Amy provides youth the opportunity to ask questions about the Internet or general technology use. These questions are answered in the print publication or through a personal email. The answers are written in “kid-friendly” language and provide useful information on many topics such as creating websites, how to search the Internet safely, where to find age-appropriate online projects, and how to chat responsibly on the Internet.

The *Ask Amy* print feature varies in content each week and also tackles technology questions and topics to help users understand computers and the challenges that go along with using them. One child recently asked “Amy” why his computer at school sometimes seemed to work more slowly than other times. The answer was:

“Has your computer been running a little more slowly lately? It might be time to do some cleaning. There are a few easy things you can do to help your computer run its best. First, run a defragmentation utility on your hard drive about once a week. When you open, close and save files, pieces of your files can become fragmented. This makes your computer seem slower because it must access all the pieces of the file in different places. Windows includes a defragmentation utility. Click on Start >> All Programs >> Accessories >> System Tools >> Disk Defragmenter. You should also run weekly anti-virus and anti-spyware scans to keep your computer happy and healthy. These free tools can help:

AVG Free Anti-Virus and Anti-Spyware

[\(http://free.grisoft.com/\)](http://free.grisoft.com/)

Ad-Aware Free

http://www.lavasoftusa.com/products/ad_aware_free.php

Ask Amy also features a monthly essay dealing with topics of interest to young readers. These essays might discuss sports, pets, or health, always with a reference on the Internet. For example, a recent essay discussed community responsibility:

“Summertime is the perfect opportunity to become involved in helping your community. Instead of spending the afternoon watching TV shows, I like to help clean the parks and streets in my neighborhood with my volunteer group. We all wear rubber gloves and use litter pickers to safely pick up trash as we walk. A lot of the litter we find is actually recyclable. To help reduce recyclable litter, our group hopes to start a recycling program in our town. One of our ideas is to add recycling bins to our parks. Helping to keep our community clean is important to me, since I care about animals and their habitats.

“The best way to start volunteering is to find something you care about in your community. Then, think about what you can do to help. Is there a local organization you can join? If you need help finding volunteering opportunities, visit <http://www.networkforgood.youthnoise.com/> where you can search by city, ZIP code or charity name to find your perfect volunteering match. Get your friends involved too! Volunteering with a pal is a cool way to hang out and help the planet!”

Other questions focus specifically on some area of technology. For example:

“Dear Amy: How do viruses really affect the computers we use? — Raaga, Delray Beach, Fla.

“Dear Raaga: What happens to your computer depends on the type of virus that infects it. Some viruses will change program files or delete important files. Other viruses may delete everything on your hard drive. One of the trickiest kinds of viruses is called a “worm.” It is designed to copy itself and spread the virus to other computers. Worms can be spread through e-mail, which is why it is important to protect your computer by installing anti-virus software. To find out more about computer viruses, visit <http://www.ucs.ed.ac.uk/usd/cts/ol/issues/viruses/whatis.html>.

While the *Ask Amy* feature responds to reader questions, the *Speak Out* feature provides an opportunity for readers to express their opinions on various current topics. Every week 4Kids.org posts a new question for readers with an open text field for responses. Youth can answer the question and their answers are posted online. Topics range from school subject preferences to favorite pastimes. This promotes a kid-friendly community where readers can see their own responses and read what others are saying. Responses are posted for the current week, and

feedback has shown that children enjoy reading their comments and those of their peers.

Why Games?

4Kids.org also provides, and continues to expand, a suite of educational games. Since youth spend increasing amounts of time engaged in electronic games (ESA'S 2006 Essential Facts about the Computer and Video Game Industry, 2006), many researchers argue that games are a resource well suited to support classroom instruction. Just as television and movies in the 20th century created children who were content to sit and watch a screen, video games are creating a generation of youth who want to actively participate in and create their own entertainment.

Games also challenge youth in a way they appreciate. Students are not usually excited about doing difficult things -- a problem to which all teachers and parents can relate. James Gee of Arizona State University writes that schools have traditionally used two methods of getting students to do difficult work: either force them or make the work less challenging (Gee, 2003). Current thought suggests that because games are engaging, they can be an effective instructional support and they do have a place in learning (Van Eck, 2006). Game developers recognize that most youth who play games don't want them to be short and easy. Indeed, Henry Jenkins (2006) of MIT's "Education Arcade" initiative observes that students will complain if a homework assignment is too hard and if a game is too easy.

Game development at 4Kids.org is based on theories of learning dealing with "automaticity" and "fluency" to help students learn basic math and language arts skills (Binder, 1996; Bower, & Orgel, 1981; Hook, & Jones, 2002; Lindsley, 1990; Snyder, 1992; White, 1996). Students playing the games are challenged to respond quickly to problems over a series of short, timed trials. The goal is to help students become fluent in the skills being practiced -- skills such as addition, subtraction, subject-verb agreement, and parts of speech. As students play, the aim is to increase their rate of correct responses, and decrease their error rate until eventually they can solve the problems automatically. A new multiplayer game called Grand Prix Multiplication even allows students to play against each other on different computers. As 4Kids.org moves forward in the development of single and multiplayer educational games, the hope is that teachers and media specialists will access games as an instructional resource.

4Kids was one of a kind when it was created in 1995, and it now serves as an exemplar for youth-friendly Web sites.



Figure 2.

The 4Kids.org multiplayer game called Grand Prix that challenges students to practice multiplication in a race environment. Up to four (4) players can play Grand Prix at once.

Safe, Educational Sites

The "Cool Spots" section of the 4Kids.org website provides a searchable database of over 1,200 reviewed and approved sites. Comparable to an online library, "Cool Spots" holds a collection of sites featuring not only school subjects but also sections on health, fitness, culture and games. Youth visiting the site can choose from educational categories such as Social Studies Scene, Science Center, Reading Room, By the Numbers, and Art and Music. Other categories of interest to youth include: Creature Features (always popular!), Food and Fitness, Tech Buzz, and True Tech Stories. "Cool Spots" is designed to be a "safe Internet library" with information, stories, myths, and links to other online resources.

Youth may interact with the resources in a variety of ways. After choosing an area of interest, there is an option to search by using keywords or selecting links that divide a section into subcategories. For example, the Art and Music section provides subcategories of Painting, Photography, Virtual Museums, and Crafts. After the word or category is selected, all the websites pertaining to the area are returned, with five items to a page. Each site in the database is summarized, highlighting elements of particular interest to youth. There is also a link to the 4Kids.org issue in which this site was featured as well as a link to the originating site. In addition, the user has the opportunity to tell a friend about this site and rank the site. The number of individuals who have visited the site through 4Kids.org and the user ratings are displayed, so not only does the user receive information about a site, but there is also information about how others rate the site.

L'art Impressionniste Issue Date: 03-09-2003



Once considered a shocking form of painting, Impressionism at www.impressionism.org will tickle your pink. Embark on a journey through 19th-century Paris, visiting cafes to gaze at pieces of art from French impressionist painters such as Degas, Monet and Renoir. Impressionist art is characterized with loose brushwork and vibrant colors, which caused an uproar among the rich patrons of an official art show. If online art reproduction doesn't crush your pigments, take a look at the museum list for an impressionist gallery near you.

Visit: <http://www.impressionism.org/> Tell a friend about this site
 User Rating: ★★★★★ Rate this site
 11 users rated this site Visited by 129 4Kids users

Figure 3

Sample of a resource in the “Cool Spots” online database retrieved from a search in the category of Art and Music.

Summary

4Kids.org is an excellent resource for young people, with many features that encourage learning and promote safe browsing on the Internet. 4Kids is a popular link featured on education websites, such as the University of North Carolina at Chapel Hill School of Education (<http://www.learnnc.org/bestweb/kidsite>) and online publications such as *Education World*. In 2006 the American Library Association recognized 4Kids with the distinguishing title of “Great Website for Kids.”

4Kids was one of a kind when it was created in 1995, and it now serves as an exemplar for youth-friendly Web sites. May organizations that provide links to similar content also support television networks, such as Nickelodeon (<http://nick.com/>), or feature more media resources, such as Yahoo!Kids (<http://kids.yahoo.com/>). 4Kids.org is unique in that that youth may rank their favorite sites, and future development plans include expansion of the search feature so students have the ability to sort sites based on the date published and/or user ranking. 4Kids also partners with Arcademic Skill Builders (<http://arcademicskillbuilders.com/>) to provide interactive educational game play in single and multiplayer formats.

With a new feature available each week, additional resources are added to the Cool Spots and Back Issues sections of the Web site. Youth are encouraged to *Speak Out* and share their opinions, and *Ask Amy* provides the opportunity to get answers to questions related to a variety of topics ranging from cultural studies to global warming. Feedback suggests that youth enjoy searching through

the resources as well as having the opportunity to see their own comments, add their voices to current issues, play educational games, and search safe sites. Many teachers find the publication a useful reference for educational sites to accompany classroom activities and periodically print or keep the paper copies as a print reference on their desks.

References

- Binder, C. (1996). Behavioral fluency: Evolution of a new paradigm. *The Behavior Analyst, 19*, 163-197.
- Bower, B. & Orgel, R. (1981). To err is divine. *Journal of Precision Teaching, 2*(1), 3-12.
- enGauge 21st century skills: Literacy in the digital age. (2003). North Central Regional Educational Laboratory and the Metiri Group. Retrieved January 10, 200, from www.ncrel.org/engauge
- ESA'S 2006 essential facts about the computer and video game industry. (2006). Entertainment Software Association. Retrieved January 15, 2007, from <http://www.theesa.com/facts/index.php>
- Gee, J. P. (2003). High Score Education: Games, not school, are teaching kids to think. *Wired 11*(05). Retrieved January 10, 2008, from <http://www.wired.com/wired/archive/11.05/view.html>
- Hook, P. E. and Jones, S. D. (2002). The Importance of Automaticity and Fluency for Efficient Reading Comprehension. *International Dyslexia Association Quarterly Newsletter, Perspectives, Winter, 28*(1), 9-14.
- Jenkins, H. (2006). *Fans, bloggers, and gamers: Exploring participatory culture*. New York: New York University Press.
- Lenhart, A., Madden, M. and Rainie, L. (2006). Teens and the Internet: Findings submitted to the House Subcommittee on Telecommunications and the Internet. Retrieved January 10, 2008, from http://www.pewinternet.org/PPF/r/67/presentation_display.asp
- Lindsley, O. R. (1990). Precision teaching: by children for teachers. *Teaching Exceptional Children, 22*(3), 10-15.
- Snyder, G. (1992). Training to fluency: A real return on investment. *Performance Management Magazine, 10*, 16-22.
- Van Eck, R. (2006). Digital game-based learning: It's not just the digital natives who are restless. *EDUCAUSE Review, 41*(2), 16-30.
- White, O. R. (1986). Precision teaching—precision learning. *Exceptional Children, 52*, 522-534.



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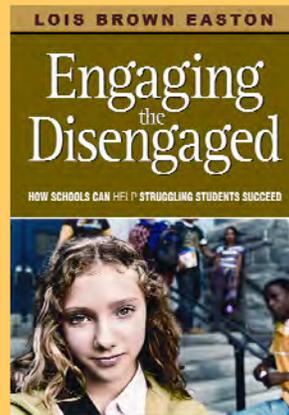
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**Books in Brief - By Jacqueline Snider
Book Review & Liaison Editor**

Engaging the Disengaged: How Schools Can Help Struggling Students Succeed

Easton, L.B. (2008). *Engaging the Disengaged: How Schools Can Help Struggling Students Succeed*. Thousand Oaks, CA: Corwin Press. 239 p. ISBN-1-4129-4998-9 (cloth) \$80.95; 978-1-4129-4999-6 (pbk.) \$38.95.



Every teacher wonders how to reach the students at the back of the class; those who zone out, seem disengaged, appear to be miles away. Easton looks at struggling students in terms of the concept of engagement, and "flow" as defined by Mihaly

Csikszentmihalyi. The suggestions and conclusions she offers come from her experiences with challenging students at Eagle Rock School and Professional Development Center in Estes Park, Colorado. Her students' voices are distinct, and clearly heard. Interspersed throughout the text are vignettes that provide real world examples of these concepts. This is a very practical text strongly anchored in theory. By looking at the "so what" and "now what" sections at the end of each chapter, teachers have an opportunity to practice some of these lessons. Easton presents an excellent analysis of self-directed learners, and looks at constructivist and traditional classrooms as well as project-based and experiential learning.

