

making the Grade

UNDERSTANDING DIGITAL LITERACY

Technology provides your child with unprecedented opportunities to gather information from an ever-expanding world of resources. With the vast World Wide Web, for instance, comes the challenge of finding and analyzing information. Digital literacy enables that process. Though a new term, the concepts it addresses have been woven for years into North Carolina's *Standard Course of Study*, a guide covering the skills taught in grades K-12.

Digital Literacy is simply the ability to use computers, audio, video and other media to gather, filter and present information. These skills prepare your child to succeed in the 21st century.

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DIGITAL LITERACY

Students today have unprecedented access to information thanks to the Internet and new technologies that bring resources to users regardless of where they are or when they need access. Today's challenge is not finding information, but learning to evaluate it with a critical eye. Digital literacy is the term that often refers to this skill of using new technologies to gather information and deciding which information is worthwhile. Building digital literacy prepares students for future careers and for adulthood when this skill will be crucial for meaningful global participation.

The starting point to build digital literacy is helping students define the information they are seeking. In other words, what is the real question they are trying to answer? What resources are the best to help them find the answer they need? Here are some ways to challenge your children before they dash to the Internet:

- Ask them to **brainstorm** questions related to a topic of interest (a favorite animal or an activity such as horse back riding or camping, a planned family trip, a local attraction to visit, a movie to see, etc.)
- Demonstrate how they can **identify key words or phrases** in the question to guide their search for information.
- **Discuss appropriate resources** for finding information related to the questions. For example, in researching travel possibilities:
 - Does your local public library offer informational DVDs to learn about travel destinations?
 - Are there organizations that specialize in travel? For example, in researching destinations, could the American Automobile Association (AAA), Chambers of Commerce, or the National Park Service's Web site, help?
 - Does your local newspaper include a travel section or page?
 - Are there published books, guides or magazines devoted to the trip you are researching?

Once a student gathers information resources, how can he/she know which ones to trust? What limitations do some resources have? Do some contain built-in biases? How can you know?

Evaluating sources before trusting the information they provide is a key step. Show your child the interactive tools provided for evaluating Web sites and print resources on the North Carolina Department of Public Instruction Kaleidoscope site at www.ncwiseowl.org/kscope/hovercraft/infoskills/KnowFlow/Evaluation/index.htm or teach them the

RADCAB™ mnemonic for assessing information at www.radcab.com/. “RADCAB” stands for “Relevancy, Appropriateness, Detail, Currency, Authority and Bias.”

Students and parents are able to use these materials at school or home – anywhere Internet access exists. Databases include *Gale Infotrac*, a collection of over 3,000 magazines in online format – ranging from popular magazines such as *Time*, *Newsweek*, and *National Geographic*, to children's magazines such as *Ranger Rick* and *Weekly Reader*.

Grolier provides a wide array of databases on WiseOwl, including two encyclopedias, an atlas, a science encyclopedia, a general reference resource and several other specialized collections. The WiseOwl offerings are rounded out with an eBook center, Amazing Animals for young children, and a Spanish-language encyclopedia.

The search tools on NC WiseOwl are specifically designed for student use. They vary by grade levels (elementary, middle school, high school) in both complexity and content searched. For example, a student searching the magazine database from the “Elementary Zone” accesses fewer than 100 of the 3400+ titles in the overall database. All search tools focus on student use. A citation accompanies every article so that students may properly credit their sources (another digital literacy skill).

NC WiseOwl provides a safer Internet alternative for children and also a vastly more effective resource.

Digital literacy also includes the ability to use technology tools and other resources to manage the information gathered. Encourage your children to record information in databases, spreadsheets, comparison charts, diagrams, etc. Links to various graphic organizers are available at Kaleidoscope's Text Transformer (www.ncwiseowl.org/kscope/Hovercraft/Transformer/Websites.htm).

You and your children also may find some ideas for the above activities at the Kentucky Virtual Library (www.kyvl.org/html/kids/homebase.html).

The ease of locating information online also makes it easy to misuse information. Talk with your children about the ethics of accessing and using information found in electronic resources. It's easy to copy and paste information from a Web site to a document, but is it the right thing to do? What does it mean to create original work and to give proper credit to others' work when you use it? These aspects of digital literacy are serious ones for students as they complete assignments and create projects. The NC Department of Public Instruction's Web site on plagiarism includes sections for students and parents at www.ncwiseowl.org/it/plagiarism/default.htm.

The site includes a child-focused brochure at www.ncwiseowl.org/it/plagiarism/docs/PlagiarismBrochureStudent.pdf



The NC Department of Public Instruction provides students with Internet-based alternatives to the World Wide Web. This is especially useful for working with younger students, because they are able to access only resources that have been previewed and evaluated for appropriateness. The NC Windows on Learning (NC WiseOwl) portal has offered free, online resources for nearly a decade. Together, you and your child can explore the many pre-selected resources assembled on the NC WiseOwl Web site at www.ncwiseowl.org.

WHAT CAN 21ST CENTURY DIGITAL LEARNERS DO?

Frame, Analyze and Solve Problems

Use a Storm chaser simulation, track extreme weather, and analyze data! www.ncwiseowl.org/kscope/Hovercraft/Seven/Science/index.htm

Demonstrate Creativity and Innovation

Create, invent and share your cool products with the world! Visit the mad scientist laboratory called Cranial Concoctions! www.ncwiseowl.org/kscope/Hovercraft/OnlineTools/index.htm

Locate and Use Information

Need excellent, high interest, engaging content for a school project? You'll find it here: www.ncwiseowl.org/kscope/TeacherHut/ContentColsm/index.html

Spot FAKE Information!

Toxic materials flow through the Web and in our society. Don't mistake "fake information" for "real information." Get media smart! <http://pbskids.org/dontbuyit/>

Work with Teams and Address Global Issues

Connect with students all over the world. www.globalschoolnet.org/gsh/pr/

Leverage Your Strengths

No one is good at everything. We all have a special mix of strengths, abilities and work styles. Crack your secret learning code to study smarter, not harder; to better manage your time and to become aware of how you learn best. www.ncwiseowl.org/kscope/techknowpark/Secret/Welcome.html

Lead Yourself and Others

Leverage your interpersonal strengths to influence others toward a goal. Of these eight aliens, which one seems to be a lot like you? www.ncwiseowl.org/kscope/techknowpark/LoopCoaster/eSmartz1.html

Demonstrate Integrity and Ethical Behavior

Enter the world of computer crime and security! Can you identify all the security leaks in this network? www.ncwiseowl.org/kscope/techknowpark/viruses/hacker.html

ACCESS ONLINE NEWSPAPERS PUBLISHED IN THE US AND AROUND THE WORLD

The Newspaper Association of America Foundation makes newspapers accessible through a clickable map. Visit www.naa.org and click on Newspaper Web sites on the right side of the page to reach Newsvoyager. Click on a state to access its online newspapers. The Newseum offers today's front pages from around the world. Search "today's front pages" at www.newseum.org.

[Activities]

Getting Acquainted with Newspapers in Print and Online

Look for references to the World Wide Web and other online communication in the print edition of your newspaper. Does the newspaper refer readers to Web sites? Does the newspaper provide email addresses for reporters and editors and invite readers to respond to stories and/or submit content for online publication?

Become familiar with the Web sites for newspapers that serve your town, county and region. The North Carolina Press Association lists NC newspapers in alphabetical order by city. Visit www.ncpress.com/ncpa/newspersonline.html.

On a specific day, have your children read the print editions of one or more newspapers that serve your area and then read the online editions of the same newspaper(s). To help your children become familiar with both editions of the newspaper, work with them to understand the organization of the different versions. Ask your children to name the sections of a print newspaper (news, sports, features or "life" sections) and then determine if the same sections appear in the online edition.

Discuss their reading, asking specific questions about interesting stories and general questions such as:

- What do you like best about reading the newspaper in print?
- What do you like about reading the online edition?
- What appears in both versions, particularly on the front pages?
- What do you find online that does not appear in the print edition? In particular, have your children look for visual elements such as photo galleries, video and multi-media presentations. They should also look for content provided by readers that might include photos and/or comments to stories submitted by readers.
- How often does the newspaper update the information it posts on its Web site? Can readers sign up to receive updates through email?
- Does your newspaper offer a replica of its print edition (called an e-Edition)?

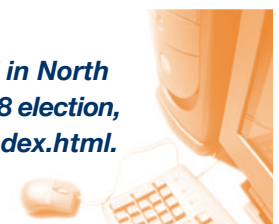
Conducting Research: Focus on news sources and on local problems

Encourage your children to identify problems and issues that are important in your community.

- Have them use the search function on newspapers' Web sites and/or in their e-Editions to conduct research.
- Together, choose KEY WORDS that relate to their search and then choose relevant stories from your search results.
- Encourage your child to search the Web sites of other community news organizations.
- Talk about the impact that specific community problems have on you and other citizens.
- Discuss the causes of the targeted problem and any solutions your children identify in their research. Encourage your children to think of other solutions, particularly to problems that affect them.

[Tip]

For a collection of front pages published in North Carolina newspapers the day after the 2008 election, visit www.ncpress.com/electionpages/index.html.



DIGITAL LITERACY AT SCHOOL

All North Carolina schools teach what we now call digital literacy skills from kindergarten through grade 12. Digital literacy falls under the broader “Information Skills” area. Your child should expect exposure to digital literacy, especially in English/language arts, the sciences and in computer/technology skills curricula.

“Literacy” involves experiencing a wide variety of reading, listening and viewing resources to interact with ideas in an information-intensive environment. Students will be able to:

- select discriminately from a wide array of resources,
- judge quality and usefulness of resources for the specific task, and
- adapt and transfer strategies for seeking information among various technologies

In the language arts curriculum, “...engaged learners explore options in presentation: films or videotapes in the study of literature and language; audiotapes in the study of oral language; and word processors and other media in composing, revising and publishing compositions.” Students at any grade level continue to develop skills in the three language areas: oral language, written language and media/technology use.

North Carolina’s science curriculum includes technology and, therefore, also infers aspects of digital literacy.

The reality is that the term “digital literacy” is new, but the concepts it addresses have been woven into the *Standard Course of Study*, North Carolina’s guide to K-12 curriculum, for years.

WHETHER WORKING WITH PRINT AND/OR ONLINE NEWS SOURCES, STUDENTS SHOULD:

1. Look for stories, topics or problems that interest and/or affect them.
2. Find the names of reporters who cover a story, topic or problem of interest, and follow the reporting and opinions submitted through letters to the editor or in reader comments posted online. In stories, look for the names of individuals who comment for publication and names of individuals or groups/communities that might be affected by actions of individuals, businesses or governments. Who are these people? What is their interest in this topic? What do they have to lose or gain?
3. Look for contact information. Find names, phone numbers, dates and times for meetings, Web sites and other information that relate to the problem.
4. Focus on fundamentals of “news literacy,” asking: What’s fact? What’s opinion? Whose opinion? Do those who offer opinions provide evidence? Can the information be verified?
5. Discuss the codes of ethics that apply to journalists and emphasize the importance of fairness and accuracy in reporting news. In today’s news environment, some news resources rely on information providers who may not be journalists. Some information sources may be funded or otherwise supported by groups with goals other than news-gathering. This can make a difference in how these groups handle information and report it.

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This is one in a series of publications produced by North Carolina Newspapers in Education with support from the North Carolina Press Foundation and the Public Schools of North Carolina. Watch for other tips for helping your child during the coming months.



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