While the Internet is now the number one information source for both children and adults, research is showing that online reading does differ importantly from print-based reading (Coiro & Dobler, 2007; Coiro, 2007). In fact, learning how to obtain sound, relevant information from online locations requires specific kinds of practice and experience (e.g. Leu et al., 2011; Turcott, Hamel & Laferriere, 2011), and there is little evidence that schools are currently providing this experience (Leu et al., 2011). Children need to learn effective strategies for identifying valid information and information sources, and navigating hypertext links. These are elements of information literacy but also involve a lot of print literacy elements such as good reading comprehension strategies (e.g. Coiro, 2005, 2011; Leu et al., 2011; Bertelson & Fischer, 2003) along with an understanding of digital literacy (how to find, evaluate, and effectively use online information). Gathering information online may require even more sophisticated reading comprehension strategies (Leu et al., 2011; Schmar-Dobler, 2003), and, interestingly, students are aware that they need help learning to evaluate online information (Media Smarts, 2012). The combination of reading comprehension and digital literacy is an important instructional focus and can be incorporated into any given subject area.

Teachers can:

Start with identifying important questions: helping students develop generative and interesting questions (not just factual information-gathering ones) in groups to set the stage for their online inquiry.

Help students navigate complex information networks to locate appropriate information by using age appropriate web search tools, or select some sites yourself beforehand that seem useful. Help students develop some basic knowledge about websites, such as how to “read” a URL; how to find the publisher of a website; and how to validate a website (see list in Web-based Resources for students and teachers at the end of this article).

Work with students to question and evaluate that information through group activities and following up with class sharing of their experiences: Practice looking at and deconstructing the content of particular websites by considering questions such as: Where is the important information? What sources of
information did the website use and are those good sources? How do you identify the sources? (Alan
November’s site has useful questions to pursue, and the Media Awareness Network also provides some
very helpful curriculum examples, activities, and suggestions.)

Work with students to decide what the most important and valid information seems to be from these
searches and help them synthesize it to address those questions. Make sure that students discuss and
understand what information gets left out in this process and why. Also, discussing what new questions
may have been raised by the first web search may prompt a second, more focused, round of searching.
Raising questions such as how web-based research differs from the experience of regular library searches
can lead to discussions about particular online features such as hyperlinks, that provide detailed
information about a word or idea, right when you need it, and then allow you to continue the thread of
reading you were already engaged in (Look at the section of resources called Literacy & Technology for
more curriculum ideas).

You can create activities for individuals, small groups, or the whole class to communicate the learnings
from these investigations using different online formats, where each one supports a different multi-literacy
experience: a class blog, a web page, or a class or small group video presentation, for example. Creating a
web-based resource that summarizes your student’s learning (such as a blog) both makes students value
their collective efforts and can also serve as a potential online resource for other teachers and their classes
to use.

Worried you don’t have the expertise to do this? Remember to bring in your students’ knowledge and
skills as a resource to help you plan and create an effective learning experience. This will prevent you
from feeling that it has to be “right” the first time. Instead, you can be learning along with the students.
Even quite young students these days have some online knowledge to bring to such activities, and research
with second language learners has found the online context supportive for language learning (e.g. Brandl,

Very young students and students with learning difficulties have also benefited from using e-readers (e.g.
Moody, 2010), and there a lot of different ones to choose from. Those that allow font size manipulation,
text-to-speech, and hyperlinks can be really helpful classroom tools.

Check out how some other teachers in your school or district might be doing Internet-based research and
reading in their classrooms observing how someone else does that can be helpful and teachers are usually
very happy to explain what and why they are doing. Or, start by planning such an activity with another
teacher. Having a buddy to discuss things with later provides both support and motivation to continue to
try new things.

Additionally, the links below provide some curriculum suggestions for incorporating digital tools to
enhance literacy in your classroom:
References and Further Reading:

Research on Web Literacy

- Scholastic Inc. Strengthening reading and writing skills using the Internet. http://teacher.scholastic.com/professional/teachtech/internetreadwrite.htm

Literacy and Technology


The opinions in this article do not necessarily represent the positions of either ETFO or OISE.

**Multiliteracies**


**Web-based Resources for students and teachers:**

- Ask Jeeves For Kids http://www.ajkids.com/
- Yahoo for kids http://yahooligans.yahoo.com/
- Google scholar for academic work http://scholar.google.com
- Bloggers you can follow with ideas for elementary teachers using IT http://www.edutopia.org/spiralnotebook/mary-beth-hertz
- In the elementary art classroom http://voices.yahoo.com/using-technology-elementary-art-classroom-6257142.html
- For literacy purposes for children with learning difficulties http://www.ldaofmichigan.org/articles/early_intervention.pdf
- The most recent winners of Canada’s teaching with technology award: get a sense of what some teachers are doing. The winner for 2012 was a Grade 1 elementary teacher! http://www.teachingwithtechnology.ca/winners.php
- Alan November’s site: November Learning: Information Literacy resources http://novemberlearning.com/resources/information-literacy-resources/
- Using technology to support reading and information literacy http://www.ncrel.org/sdrs/areas/issues/content/cntareas/reading/ri300.htm