

Teaching Research Skills to Young Students: The Critical Role of the Media Specialist

by Beth Dempsey

- Janis Wagner remembers when she used to test her students to see if they could identify parts of a typical computer. An elementary school media specialist for 18 years, she says, “I used to call them up one by one and say, ‘Show me the monitor, show me the mouse.’ I don’t do that anymore. The computer is so much a part of their lives.”

While understanding how to operate a computer may be part and parcel of every kid’s life, understanding the vast content it connects to continues to elude them . . . and most adults, too. Research, though faster, is complicated by the very item that makes it more productive: the Web. That fire hose of information provides so much data it overwhelms the novice researcher—especially when that researcher is under the age of 10! Water, water everywhere and not a drop to drink.

The process of teaching young students how to research and then read for information is also complicated by a variety of educational trends. Teachers point to the ever-increasing demands that standardized testing places on their time. There is simply more to cover. Additionally, the trend toward open classrooms and team teaching, though shown to be beneficial overall for students, often means more projects with less time available for each one.

There’s perhaps **no greater opportunity** for a **media specialist** to **support** the curriculum and **connect** with both **teachers** and **kids** than by **encouraging** research activity. **Technology** provides an **opportunity** to more effectively integrate **research-based assignments** into **classroom work**.





TEXAS LIBRARY CONNECTION *EDUCATION GENIUSES

Children need TLC. In Texas, students receive TLC in the form of a solid education. It was Anita Givens, Senior Director of Educational Technology for the Texas Education Agency, who helped implement the Texas Library Connection (TLC), an initiative providing every student with access to current information resources — regardless of a district's size or geographic location. Anita engaged Gale to develop a custom interface highlighting resources that correlate to the state's content standards. Now, almost 4 million students have unlimited access to the Texas Library Connection from their classrooms, school libraries and homes. Proof that a little TLC goes a long way.

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Given these information riches, combined with the fact that there is less time to wade through them, the media specialist now occupies the critical position of cornerstone in the framework of teaching research skills that can last a lifetime.

Building Structure that Encourages Deep Reading

While the Web may be chaotic, it's important to remember that today's students have been raised in a world where information has been fed in disconnected chunks. Chaos isn't new to them. As Carolyn Boiarsky notes in the *Journal of Popular Culture*: "While still in their playpens, the members of this generation were introduced to the broken story lines of *Sesame Street* in which the oral/aural narratives were interrupted by short sound bytes for letters, numbers, and colors. Such fragmented narratives not only reinforced the short attention spans of these children but also provided them with a new story schema that did not require coherence among the parts." When faced with a barrage of information, kids have the capacity to scan for bytes, but not necessarily the ability to weave it into a story.

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At Michigan's Deerfield Elementary, Wagner defines the challenge simply: "You have to make research child-friendly." She helps young students—in grades as low as first—conduct effective online research by sorting information resources for them. Each computer in the building defaults to the Learning Center's home page. On it, Wagner organizes resources by type and by assignments—for example, resources devoted to Ellis Island and biographies. Students simply click through to sites and resources that are vetted by Wagner for accuracy and relevance to the students' assignments. From there, says Julee Thompson, who teaches a Deerfield third and fourth grade multi-age class, kids can get to the information that improves the final outcome. "They're learning information-age survival strategies," she says.



Janis Wagner heads the Learning Center at Deerfield Elementary, an acclaimed magnet school in Michigan's Novi Community School District.



All Deerfield's computers default to the Learning Center home page, directing students to appropriate resources and away from the free Web.



Kids InfoBits™ home page allows younger students to ‘drill down’ to topic through its lively icon-rich interface. Older students can enter a search term in the search bar to work faster.



Results are organized in ‘file folders’ to make it easier for student to find the type of resource.

Thompson’s team-teaching colleague, Julie Kaufman, fears that in today’s compacted educational time schedule, there’s little time for “deep reading.” Wagner’s organization of resources gets students directly to the “right” information, making the best use of their time.

It’s Not Just About Content Anymore

Educational experts attest to Wagner’s strategy of organizing research by narrowing the choices for information. But again, technology adds complexities to the process of identifying the right resources. In addition to looking at appropriate reading levels and standard measures of quality—relevance to the topic, accuracy, timeliness—experts note that educators should look at the navigational strategies children will need to understand computer-based text. In the *Journal of Research on Technology in Education*, Lawless, Mills, et al. recommend that educators point young learners to resources with fewer hypertext links, suggesting that “teachers wishing to use hypertext learning environments for instruction . . . implement this technique only with more advanced learners.” Their study indicated that young students would be better able to sequence information, weaving an appropriate story, if they weren’t exposed to “an open-ended, ‘unfinished’ reading environment.”

These findings are important considering the home pages of popular online search pages for kids. Hyperlinks to other pages abound, and educators should be wary of leading kids to them without ample instruction on how to navigate them. Additionally, these sites nearly always contain advertising. Though today’s students have been raised in an advertising-laden society, a study conducted by Henke and printed in the journal *Advertising and the World Wide Web* showed that children have trouble identifying the goal of ads on the Web versus those they see in other media. They simply have less experience with Web ads.

Beyond the Free Web

The pitfalls of the free Web can be avoided by taking advantage of state-wide information resources, which often make premium databases available free to schools and citizens. For example, Wagner's Learning Center home page connects to MeL, the Michigan eLibrary, which offers a variety of premium children's databases free to all Michigan citizens. Through MeL, Wagner can point Deerfield students to such magazine and news databases as **Kids InfoBits™**, which culls only the reference and periodical resources appropriate for children into an advertising-free research environment.

The child-friendly spin-off of the venerable InfoTrac search service was released in a 2.0 version in February 2002 and will be followed shortly by 2.1. Aimed at students in grades K through 5, **Kids InfoBits™** product manager Julia Furtaw says it serves two groups of students: "We're really looking at the K-2 group and a second, more research-savvy group from grades three to five. They approach searches in two very different ways."

Furtaw says the younger group often can't narrow their topic to a single phrase, or if they can, they don't know how to spell it. **Kids InfoBits™** opens with a lively, icon-rich topic tree that enables children to click and drill down to a single topic. For the upper-elementary level kids who know what they want and are less patient than their younger counterparts to get to it, the database also includes a search bar on the opening page. Type in the subject or keyword and results are delivered in a simple format that organizes each resource in folders by type—reference, magazine articles, newspaper articles, charts and graphs, maps, flags and seals and images. That span of resource type is an important part of the product, says Furtaw. "The strength of this product is the combination of reference

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Charts, images and graphs are available within text or as separate elements, serving the multiple ways children learn.



Though encyclopedias tend to be the first choice for research, picture books can be a source of information, too. For a recent assignment on Michigan history, Deerfield turned to “M is for Mitten” from Sleeping Bear Press’ state-by-state alphabet series.

written specifically for elementary school students and periodical content that’s also written specifically for that level.”

The concept behind **Kids InfoBits™** is much like Wagner’s Learning Center home page: Organize vast resources into a narrower range that’s child-friendly, highly structured so kids can find things easily, and vetted for appropriate content. The content is drawn from a variety of high-quality sources: references from Blackbirch Press (for example, *The Kid’s Visual Reference of the World* and *Encyclopedia of Science and Invention*) and periodical content from 70 full-text magazines aimed at the elementary audience (such as *Discovery Kids*). Content from Kidbits, Blackbirch’s popular reference, populates the charts and graphs portion of the database with colorful images. News content, from Knight-Ridder and UPI, is carefully selected so students aren’t overwhelmed with irrelevant results.

The addition of charts, graphs, and images in **Kids InfoBits™** (which can be accessed separately from text) is an important feature in helping kids read for information. Wagner’s teaching colleagues Thompson and Kaufman note that they like to use resources which address the multiple ways in

which kids learn. For example, while one child may find information easiest to understand when it’s explained in text, another may only grasp it when it’s presented visually in a graph. To that end, **Kids InfoBits™** includes a variety of educational handholds that deliver information in multiple ways. For example, there are locator maps that identify where a particular country is found on the globe.

Print Has Its Place

Wagner’s resource list isn’t just a click-through to online resources. “I list appropriate print resources, too,” she says. She’s taught young students to find books on the shelves by their “addresses,” making it easier to understand the concept of spine labels.

Kaufman and Thompson appreciate the inclusion of print. Says Kaufman, “I think you need to read a book to practice getting at in-depth information. We’re teaching a microwave generation and they need to be taught to do more than skim the surface.”

Reference sources for elementary and middle school grades are multiplying as publishers learn more about what engages kids. Such publishers as Blackbirch Press, KidHaven Press,

and UXL—imprints of reference specialist Gale—deliver high-quality content on uncrowded pages with colorful images, shorter sentences, and larger type sizes that make it easier for kids to intuit important information.

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"Ninety percent of what they'll read as adults is going to be for information," says Thompson. "It gives them practice distilling information from different types of sources."

Additionally, she points to how easily engaged kids can be with a picture book, making research fun.

Collaborate, Collaborate, Collaborate

At Deerfield, the Learning Center is physically located at the hub of the school. Wagner makes a point to be sure it's the research hub, as well. Her organization of resources by topic and assignment works because it's relevant. She works directly with teachers to have resources ready to support classroom curriculum when students need them. "We brainstorm together to find the way the students learn best," she says.

In addition to scheduled weekly planning time with her colleagues, Wagner keeps in touch informally, asking at lunch about upcoming assignments. Additionally, she encourages flextime in the Learning Center, when teachers can join their students as they conduct research. "We all work together to help the students," she says.

Publishers are often good sources of ancillary items that make teaching research-related skills easier. For example, **Kids InfoBits™** includes a variety of supports in its "Teacher Toolbox" that media specialists and their colleagues can use. The downloadable templates, written in language appropriate for elementary students, can be used by teachers to explain such areas as how to write a topic sentence. Says

product manager Furtaw, "It's really designed to be a full-service Resource Center for kids and educators."

Research: The Media Center Touchstone

There's perhaps no greater opportunity for a media specialist to support the curriculum and connect with both teachers and kids than by encouraging research activity. Technology provides an opportunity to more effectively integrate research-based assignments into classroom work. Remember these points:

- ◆ Sift resources for teachers and students, pointing them to the best ones for their assignment. Consider Wagner's strategy of having all school computers default to the Learning Center home page, rather than the school home page.

- ◆ Evaluate electronic resources, not only upon the quality of the content, but on the presence of advertising and the number of hyperlinks buried within the text.

- ◆ Although the free Web has its place in research, look for opportunities to connect students with premium databases and specific Web sites that don't rely on advertising.

- ◆ Look for teacher tools available from publishers and share them with faculty.

Above all, collaborate with teachers to learn about upcoming assignments and how you can help turn research assignments into opportunities for children to learn lifelong information processing skills. By carefully planning and interacting with teachers, library media specialists can make the media center the curricular hub of the school—for any grade—and a key ingredient in improving student achievement.

Resources:

To learn more about Deerfield Elementary, go to the school's Web site at <http://www.novi.k12.mi.us/df/novidf.html>.

To learn more about **Kids InfoBits™**, visit <http://www.gale.com/schools>.

Beth Dempsey is a frequent writer on trends in online reference.

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CORINNE, MICHELLE & BRIAN, *HOMEWORK GENIUSES

Most completed homework is found hanging on refrigerator doors. Some, however, ends up displayed at the annual National Education Computing Conference. That's where Corinne, Michelle and Brian, students from Northside Independent School District in San Antonio, Texas, each had the opportunity to present their homework results. Utilizing such Gale databases as *InfoTrac® Kid's Edition*, *Student Resource Center* and *InfoTrac® Custom Newspapers*, these students demonstrated how they used statewide library resources to complete their inquiry and research-based projects. Who knows? This recognition may just open some doors — other than that to a refrigerator — for these students in the near future.

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