

A person wearing a teal long-sleeved shirt is holding a white tablet. The tablet screen is black with white text that reads "Digital Native ≠ Digital Literacy". The text is arranged in four lines, slanted slightly to the right. The person's hands are visible at the corners of the tablet, and their hair is partially visible at the top right.

**Digital
Native ≠
Digital
Literacy**

By working together, principals, librarians, and teachers can transform learning environments to ensure that students achieve digital literacy.

By Ann M. Martin and Kathleen R. Roberts



While working on homework, a 9-year-old asked if he could use a tablet computer. On the tablet, he activated the voice assistant, and asked, “What percent is one-eighth plus one-fourth?” The assistant answered, “0.375 converts to about 37.5 percent.”

The student has the technical skills to effectively find and retrieve information via digital means. But does he know how to judge the validity of that information? Can he replicate the answer by working it out mathematically? How can he communicate the thought process for analyzing this problem? Just because many students today are digital natives does not mean that they are digitally literate.

As a school’s instructional leader, the principal is responsible for ensuring that effective and engaging student learning takes place. Digital literacy is a critical component of that educational goal. But what is digital literacy? The American Library Association’s Digital Literacy Task Force (2011) defines it as, “the ability to use information and communication technologies to find, evaluate, create, and communicate information, requiring both cognitive and technical skills.” Students today are comfortable using devices and computer-based tools to find information and immediate answers, but digital literacy requires more from them than the simple ability to use technologies.

School librarians are trained to teach students the specific set of literacy skills they need to navigate the digital environment. For example, in a print environment, alphabetizing is essential to finding information in the

table of contents and index. But in a digital environment, students must understand keywords and related topics to be successful. Digital literacy is also integral to taking online assessments. Elementary students need to become comfortable with reading passages online so that they can successfully perform on high-stakes tests.

Picture a learning environment where students are independent readers, expert inquirers, competent test-takers, and lifelong learners. By working with school librarians, schools can teach the skills, dispositions, responsibilities, and self-assessment techniques needed for students to be digitally literate.

Building a Successful Digital Learning Environment

Principals play a big role in boosting digital literacy learning by establishing an instructional environment where teachers can collaborate with librarians on units of study. First, principals must adopt the principles embedded in AASL's *Standards for the 21st-Century Learner* in order to lead any needed changes. Principals who embrace the fundamental concepts of inquiry-based learning facilitate an environment that engages students to think, create, share, and grow.

In addition, principals must support a flexible library schedule that empha-

sizes quality over quantity of lessons. Such a schedule enables students to participate in just-in-time learning and includes opportunities for librarians to collaborate with teachers.

In schools that foster a successful digital learning environment, administrators encourage risk-taking and collaboration, identify team leaders, share data, and emphasize professional development. The Pennsylvania School Library Project research conducted by Keith Curry Lance and his colleagues found that students performed better on reading and writing tests in schools where the principal:

- Placed a high value on the school librarian collaborating with teachers in planning and teaching and providing in-service education to teachers;
- Met regularly with the librarian; and
- Appointed the librarian to serve on key school committees.

Placing the librarian on the school leadership team is essential for implementing digital literacy. By serving on the leadership team, the school librarian can more fully understand educational challenges and administration initiatives. Principals who make the school librarian aware of student needs based on data open the door for the school librarian to target lessons on improving skills in areas of concern as they collaborate with teachers. When principals encourage collaborative teaching, the school librarian brings digital literacy skills to lessons while embedding curriculum content into project outcomes. These collaborative lessons address students' need to participate in active learning.

The Librarian's Role

The school librarian can fulfill a vital role in guiding transitions to digital literacy by serving various stakeholders. For students, school librarians create opportunities in library lessons to develop skills needed to form questions and access information. They create learning experiences that balance



the information retrieval process with a well-designed end product. As organizers of knowledge, they understand how to effectively create safe access pathways for the elementary student.

School librarians must be given opportunities to collaborate with teachers because they play a key role in working with staff to promote school-wide digital literacy. One major obstacle to collaboration is lack of planning time. Staff may also misunderstand the importance of integrating curriculum content with library standards. However, principals can structure joint planning time when the librarian is unencumbered to increase opportunities for collaboration between school librarians and teachers.

School librarians should collaborate with teachers to create relevant experiences where students learn to read passages in depth for information, and at the same time skim for important facts and details. The resulting lessons fuse curriculum content, library learning standards, and an element of technology to transform learning for students. Librarians take

Principal ONLINE

Access the following Web resources by visiting *Principal* magazine online: www.naesp.org/JanFeb15

Visit the website for the American Association of School Librarians, which features a list of **Best Apps for Teaching and Learning**.

Visit the *Principal* magazine archives to access "**Safe Digital Citizenship**," which explores online safety, professional learning for staff, and continuing education for parents.

The **Common Sense Education** website features free materials on topics such as digital citizenship and blended learning.




As instructional leaders who are knowledgeable about best practices, school librarians can serve as an important resource not only to teachers, but to the principal as well. Including the librarian on the school leadership team makes them aware of whole-school data and enables the librarian to participate in instructional decisions. Inviting librarians to offer professional development at faculty meetings facilitates a collaborative environment and the sharing of ideas for lessons. When principals are committed to instructional partnerships, staff buy into the premise that student achievement increases through collaborative learning experiences.

For parents and the larger community, school librarians can maintain a website or blog, allowing 24/7 access to the online databases and showing that the library learning extends past physical walls.

results. As students gather information, questioning fosters meaningful understanding of the material. After the lesson, self-assessment tools and reflective questioning can help students internalize the information by deepening the learning experience and information-seeking process.

Returning to the opening example, when a librarian asked the 9-year-old if he could explain the answer to the math question, he drew two circles. He divided one circle into fourths and immediately said, “That is 25 percent.” He then divided the second circle into eighths. The visual was clear that one-eighth was half of one-fourth. He then said, “Half of one-fourth is 12.5 percent.” Next, he added the two numbers together to validate the 37.5 percent answer that the computerized voice assistant found for him.

The questions the librarian posed to the student after he determined the answer were critical to building his understanding of basic math principles. The school librarian who guided the student through the questions proved to him that solving the problem was a matter of thinking through the information. She encouraged him to reflect on the answer and prove the result.

School librarians are leaders in generating change in the digital landscape, which is amplified when they form partnerships with administrators and teachers to develop lifelong learners. Change in the learning landscape materializes in schools where principals value the positive impact school librarians have on transforming the learning environment and educational community. 

Ann M. Martin is former educational specialist in library services at Virginia’s Henrico County Public Schools and a past president of AASL.

Kathleen R. Roberts is the school librarian at Rivers Edge Elementary School in Glen Allen, Virginia.

When principals encourage collaborative teaching, the school librarian brings digital literacy skills to lessons while embedding curriculum content into project outcomes. These collaborative lessons address students’ need to participate in active learning.

the initiative to integrate the latest technologies, including apps, websites, and interactive tools into curriculum-based lessons.

Teachers and students can build confidence in using the technology, and at the same time students can develop reading habits and evaluative patterns to produce outcomes. Every time students read for information, process that information, evaluate it, and then produce an outcome—whether it is a project, paper, or answering a set of questions—they are developing lifelong skills that transfer to good reading and testing strategies.

How Questioning Strategies Impact Digital Literacy

School librarians recognize that the necessary skills for digital success include higher-level questioning strategies before, during, and after a learning experience. Through coaching and consulting with teachers during lesson planning, librarians can guide teachers to begin lessons with essential questions. This trains students to create an essential question before searching for information. Framing the key learning goal through higher-level questions narrows the focus for students and helps them target their