We are currently embarking on the new “great frontier” for early childhood and elementary education: digital tools are reshaping what and how educators teach young children and how we think about their learning. As with any new frontier, the view is both treacherous and exhilarating. This issue’s theme, “Beyond PowerPoints and Scavenger Hunts,” investigates what children know about the plethora of digital tools available and how they use them, as well as how teachers integrate media in creative and critical ways. Given the seismic changes in technologies over the past few years, we are pleased to share the journey with fellow educators.

Treacherous Frontier
The landscape of this frontier is changing tectonically. Perhaps most indicative of the changing landscape, the National Association for the Education of Young Children (NAEYC), a leading professional organization for early childhood educators, is currently revamping their position on technology use (NAEYC, 2011). In reviewing the latest draft (http://www.naeyc.org/positionstatements/technology), it is clear that some major shifts have occurred since the previously released position in 1996. For instance, back then, their position was that children younger than age 3 had no reason to use technology. Now, in 2011, the new position statement invites children from birth through eight to indulge in all that digital tools have to offer. Additionally, the new position statement broadens the term “technology” to include interactive tools such as multimedia games, ebooks, and computers. However, the new statement does not include non-interactive media, such as TV, at all—perhaps indicative of what we, as a society, perceive to be the most important aspect of today’s digital media: interactivity.

The frontier is also treacherous because we still have competing positions about whether and how to use digital technologies with young children. On one hand, professional organizations such as the National Council of Teachers of English (NCTE) and the International Reading Association (IRA) propose that digital technologies can be used thoughtfully for educational purposes (NCTE, 2008; IRA, 2009). On the other hand, the American Academy of Pediatrics (AAP) and the 2011 White House Task Force on Childhood Obesity report suggest that children have limited screen time and that children under age 2 have none at all (AAP, 2010; U.S. Task Force on Childhood Obesity, 2011). Sexual and violent content, commercial consumerist messages, stereotypical depictions, and continuously stimulating light and sound waves are among the complaints of naysayers. Research suggests that these warnings are valid. Attention deficit disorder, obesity, irregular sleep patterns, and negative impacts on development (among others) have been linked to early media exposure (Brooks-Gunn & Donahue, 2008). Yet, as with most frontiers, these challenges may not overshadow educators’ and families’ hopeful willingness to explore.

Exhilarating Frontier
The frontier is exhilarating because an evolving field of research also demonstrates the usefulness of digital media in supporting social, linguistic, and cognitive development—especially as these contribute to literacy development. Studies demonstrate that digital media have the capacity to enhance children’s knowledge of narrative (e.g., Linebarger &
Piotrowski, 2009), reading (e.g., Levy, 2009; Verhallen, Bus, & de Jong, 2006), writing (e.g., Mavers, 2007; Wollman-Bonilla, 2003), and emergent literacy skills (e.g., Shamir, 2009; Smith, 2001). Of course, all of these studies point out that there are better and worse ways to integrate these media.

Not only are digital media valuable for supporting literacy development, they are also valuable tools that children will need to master, just like we had to master holding pencil to paper decades ago. The International Society for Technology in Education’s (ISTE) NET-S Standards lists the technology skills that a child should have by age 8 if he or she is to have all the advantages needed to succeed in formal schooling (ISTE, 2007). Notably, this assumes that children have opportunities to engage with technology prior to schooling, and rests on the assumption that children who are not exposed to technologies prior to schooling will be at a disadvantage, similar to a child who doesn’t know the colors or the alphabet (Judge, Pucket, & Cabuk, 2004). Technology is the reality in today’s world: digital tools will continue to evolve and demand an audience.

**Exploring the New Frontier**

The landscape of the digital technology frontier is continuously shifting and requires us, as educators, to be especially thoughtful as we venture into using them with children. Roadmaps for integration commonly include these guidelines for educators:

1. Use digital tools with intention. Each tool should be selected because of an instructional purpose and evaluated as to whether it met that purpose.
2. Don’t be fooled by “e-worksheets.” You know the type—the websites and programs that might as well be multiple-choice tests. These tools lack interactivity. And despite their bells-and-whistles, they do not contribute to learning any better than the worksheets from which they’re derived.
3. Look for interactivity. The more feedback a child can get from interacting with a tool, the better. This feedback can come in many forms, from authentic conversation among other users to computer-generated feedback. Games, virtual worlds, online communication forums, and interactive books are examples of interactive tools that can contribute to learning.
4. Look for creativity and innovation. Tools that inspire this kind of thinking will be much more valuable to any child’s learning.
5. Don’t leave it up to the digital tool alone to help a young child make meaning. The fact remains that learners still need that “more knowledgeable other” (whether a peer, parent, or teacher) to guide them in learning to use a tool and to scaffold their learning from its usage.
6. Have discriminating taste. When it comes to choosing the right tool—for your classroom or for a specific child—weigh what you know about the child(ren) (development, abilities, interests, etc.), the tool, the instructional purpose, and the resources available.
7. Allow for new leaders. You never know until you start exploring who might be able to show the way, so as you guide your class, be on the lookout for new leaders who have knowledge about digital tools (maybe a student, a colleague, or a family member) who can help show the way.
8. Don’t be afraid to stop and ask for directions! Continue to investigate current research and professional guidelines about how to best navigate this quickly changing frontier.

**In This Issue**

As evidenced by the articles presented in this issue, the frontier requires a thoughtful, reflective, and ongoing exploration. We invite you to new discoveries with our authors as they explore this new frontier.

Autumn Dodge, Nahid Husain, and Nell Duke provide interesting documentation of young children’s Internet activities. They interviewed 37 kindergarten, first, and second graders to see what they used the Internet for and what they knew about it. Their inquiry sheds light on the limits of children’s knowledge and opportunities for intentional instruction about Internet use.

Terry Atkinson invites us to learn along with Maya, a fourth-grade teacher who integrates technology into an Internet research project. She shares the experiences of enthusiastic fourth-grade researchers who used scrapblog.com to publish their findings.
Carol Bedard and Charles Fuhrken describe a film project with fourth- and fifth-grade students. Alfonso, one of the student film-makers, provides a glimpse of how one child worked across modes to construct a movie, and in so doing, came to a new appreciation for the writing process.

Kathy Short is honored as NCTE’s 2011 Outstanding Educator in the Language Arts, and Andrea García provides a beautiful tribute to Kathy’s research and teaching in this issue. Kathy’s dedication to “inquiry as a way of life” inspires us all to share her curiosity about literature and the world around us.

Professional books about digital tools entice us to Critique! Design! and Engage! Deidre Clary, Amy Johnson Lachuk, Andrew M. Corley, and Lucy Spence invite us to read teachingmedialiteracy.com: A Web-Linked Guide to Resources and Activities (Beach, 2007), Artificial Literacies (Pahl & Rowsell, 2010), and Making Meaning: Constructing Multimodal Perspectives of Language, Literacy, and Learning through Arts-based Early Childhood Education (Educating the Young Child) (Narey, 2009) to discover how we can improve our practice by integrating these exciting tools.

The 2011 Orbis Pictus Awards celebrate the very best in children’s literature for this year. Kim Ford, Jeffrey S. Kaplan, Diana Porter, Barbara Chatton, Jan Kristo, Deborah Thompson, and Lisa Morris-Wilkey give us detailed descriptions of the stories worth celebrating.

Finally, in “Conversation Currents,” Julie Coiro and Sara Kajder converse about how they use digital tools with teachers and children. We are excited to share their insights and the many tools that they describe.

References


