

*Del Siegle, Ph.D.***Special Issue: Gifted Students and Technology**

Technologies that seemed miraculous 5 years ago are commonplace today. We live in a world in which gifted students seamlessly interface with advanced technologies on a daily basis. For them, technology is more than a tool with which to learn—it is an essential part of their lives.

In this special issue, we explore some of the ways in which technology is being used by early childhood educators, as well as strategies to increase gifted girls' involvement with technology. We look at different ways to be gifted in technology and how to increase student literacy. We also explore teacher attitudes toward technology. Some of the articles feature an in-depth look at research related to the topic, while others provide practical tips for implementing technology into services for gifted and talented students.

Sally Reis and Carol Graham open the issue with a comprehensive review of the literature related to females and their interest and achievement in mathematics, science, and technology. In "Needed: Teachers to Encourage Girls in Math, Science, and Technology," they describe a program that Graham created to bring high school girls and fifth-grade girls together to explore math, science, and technology. Initially, the older students researched eminent women in mathematics, science, and technology and explored the problem of limited numbers of females in these fields. The high school girls organized their findings and developed a mentoring program that increased the younger girls' knowledge and interest. Additionally, Reis and Graham provide a variety of Web sites and specific teaching and learning strategies to involve talented girls in these areas.

Parents and educators of young children will enjoy reading Nancy Hertzog and Marjorie Klein's article, "Beyond Gaming: A Technology Explosion in Early Childhood Classrooms." Their article alleviates some common fears held by many parents that technology will isolate and harm their young children by providing support for using technology and noting that its use actually enhances student creativity. Hertzog and Klein share how teachers from University Primary School at the University of

Illinois at Urbana-Champaign are incorporating technology into the curriculum they teach. They describe kindergarten students who are creating Web pages, filming and editing digital movies, and developing PowerPoint presentations. They not only show that these technologies are effective, but also share how and why they work.

Marge Hctor shares strategies that develop students' information literacy in "Accessing Information: The Internet—A Highway or a Maze?" She reports that, while young people view technology as an essential part of their lives, they often do not use it efficiently or effectively. Hctor provides a variety of classroom activities and Web sites educators can use to help students navigate the digital maze known as the Internet.

In "Assessing and Addressing Teachers' Attitudes Toward Information Technology in the Gifted Classroom," Elizabeth Shaunessy provides a comprehensive review of the literature related to teachers' attitudes and beliefs toward technology. She argues that adequate training, exposure, and use of technology can significantly impact how teachers view technology. Shaunessy encourages schools to develop learning communities where educators can support each other as they explore ways to foster student-centered learning and decision making with technology.

Finally, in "From Bits and Bytes to C++ and Web Sites: What is Computer Talent Made Of?," Brenna O'Brien, Reva Friedman-Nimz, Judith Lacey, and Debra Denson review the research literature related to technology and education and report findings from their study of students in a computer club. They suggest that technology-gifted students follow two different paths. Some are programmers who enjoy working with programming code to create applications. These students tend to prefer learning content independently. A second group, which the authors label "amalgamators," are more likely to enjoy interacting with others and helping others use software. These students excel at using computer programs and assisting others with software problems. [GCT](#)