Introduction

D. D. SHADE, EDITOR

Several publications have come out in the past few years that have fueled the fire in the “to computer or not to computer” debate regarding children and their education. The two most noted publications are Jane Healy’s *Failure to Connect* and The Alliance for Childhood’s *Fools Gold: A Critical Look at Computers in Childhood.* To those new to this area of research, this might appear to be a new “hot” debate. However, for old timers like me, it is the same debate that has been raging since 1984. In every conference where I have presented a paper, from then until now, I have defended my position as one who believes in developmentally appropriate software (as defined by Susan Haugland of the KIDS Project and Warren Buckleitner of the Children’s Software Revue) can be viewed as another manipulative with which children can explore the world. All of the effort I and many, many others poured into the National Association for the Education of Young Children (NAEYC) between 1983 and 1995 has yet to have the influence we had hoped. The Technology and Young Children caucus at NAEYC (founded in 1991) does their best each year to expose as many early childhood educators as possible to computers and excellent software. And the debate goes on.

Having read both of the works noted above, I believe that neither of them represent a balanced view of the wealth of research in this area. In fact, both publications remind me of a bet I once made in graduate school. As a young doctoral student at UNC—Greensboro in the early 1980s, I had the annoying habit of cracking my knuckles during class. A slightly annoyed but well-meaning friend said to me, “Dan, I can prove to you that research says cracking your knuckles will lead to arthritis in your hands.” I took the bet and said I was confident I could find an equal number of articles proving the opposite, that knuckle cracking prevents arthritis. We gave ourselves two weeks and began digging in the library (this was long before Internet searches and electronic databases). At the end of the two weeks we
I believe we are in a similar situation in the debate regarding whether childhood should be devoid of computers and other forms of information technology. We need a balanced report. I wonder if Jane Healy or the authors of the Fool’s Gold report know that there are equally impressive reviews of research (see any by Douglas H. Clements) that argue quite formidable that computers have multiple positive effects on children starting as young as age three? I wonder if they realize that there is a preponderance of research citing positive benefits? We were very interested in publishing research or theoretical papers that logically presented hard evidence against the use of information technology by children. We went out of our way to solicit such papers. It was disappointing that some of the papers submitted to this issue were not what we had hoped, that is, would further the research base on one side or the other of the debate.

We were not able to present an overall balanced view of the literature in this ITCE annual edition. We have, however, endeavored to cover the current range of research and thinking from researchers and educators who have a balanced approach within their own work. We begin with a number of important theoretical pieces covering constructivism (Ferguson, Yelland, & Lloyd) to developmentally appropriateness (Chang; Downes, Beecher, & Arthur) and then to the theory of Lev Vygotsky, with an emphasis on the Vygotskian approach to the use of computers in education (Bornas & Llabres; Freeman & Somerindyke; Lucklin; Pange & Kontozisis). At the same time that many have been working so hard to keep computers out of education, professional accreditation associations such as NCATE have formally assimilated the standards set by ISTE for teacher education. We have thus included two excellent articles on teacher education and implementation (Espinosa & Chen; Wang & Beasley). Next we have included some of the newest thinking in the use of computers in the classroom (Barrera, Rule, & Diemart; Beisser; Fletcher; Kelly & Schorger). We have also included a timely piece on Internet chat rooms (McCreary, Ehrich, & Lisanti) as well
as a chapter on the use of video with special needs children (Xin). The crowning piece of this year’s annual is a chapter by Michael Kalinowski entitled, “The Current Status of Technology in Education: Lightspeed Ahead, with Mild Turbulence.” In this summary chapter, Michael predicts the current trends in the use of information technology.

A number of our chapters are international as well. I hope you will enjoy the ITCE 2001 Annual and find it to be helpful in your own research and teaching needs.

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