

A Free Newsletter Produced by David Moursund

David Moursund

Over the years I have been involved in helping to start a number of different publications. For example, in 1974 I started the publication that is now ISTE's *Learning and Leading with Technology*. For a great many years I was Editor in Chief of the various ISTE periodicals.

Even though I am now retired, I continue to yearn to undertake such creative writing and publication activities. My latest endeavors are being carried out through a non-profit named Information Age Education. Through IAE, I have started a Wiki, a general-purpose Web site, and a free newsletter (see <http://iae-pedia.org/>).

Let me share some long ago history. Back when ISTE (then named the International Council for Computers in Education) was in its early childhood, it established a variety of Special Interest Groups. As the planning was going on for establishing a SIG for Computer Science, I contacted Art Luehrmann to try to get his involvement. I hope that many of you remember the name Art Luehrmann. He is one of the pioneers in the field of computers in education and a prolific author. In 1972 he published a seminal article, *Should the Computer Teach the Student, or Vice Versa?* (see http://iae-pedia.org/Arthur_Luehrmann). In this article, he introduced the term *computing literacy*. He discussed the idea of the computer teaching students versus students teaching (programming) the computer.

When I contacted Luehrmann, he was quite supportive of having a Computer Science SIG focusing at the precollege level. Indeed, he predicted it would be a huge success and might eventually grow to have a 50,000 person membership. However, he was too busy in his own computer science education writing and

speaking professional activities to add yet another commitment.

A SIG was established, but Luehrmann's prediction of a huge market for it never developed. The world of computers in precollege education moved in the direction of computer applications, computer-assisted learning, and computer literacy that involved little knowledge about or of understanding of computer programming and other aspects of computer science.

Finally, back to my latest periodical. It is called the Information Age Education Newsletter. It is free, short (usually about a thousand words), easy to read, and it comes out every two weeks. It is written for preservice and inservice teachers, and for teachers of teachers. It reflects my educational interests in computer and information science, mathematics, brain science, and uses of Information and Communication Technology. Its goal is to help improve the education of all students. To subscribe and/or to access the back issues, go to http://iae-pedia.org/IAE_Newsletter.

Finally, let me close with a "what goes around comes around" tidbit. The computer literacy movement has come and gone. All students now learn a variety of things about computers and their applications. Some of this learning occurs in school, and some of it occurs informally as students learn from each other or on their own. There is a new literacy movement afoot. It is called Computational Thinking. (See http://iae-pedia.org/Computational_Thinking.) I recently had the opportunity to be one of the presenters in a two day invited workshop on Computational Thinking run by the National Academics and funded by the National Science Foundation. In brief summary, the goal is to have all students gain some insights into the type of thinking that

computer scientists do. A somewhat different way of thinking about this is presented in [http://iaepedia.org/Two Brains Are Better Than One](http://iaepedia.org/Two_Brains_Are_Better_Than_One).

The workshop included presentations by Jan Cuny and Jeannette Wing of the National Science Foundation. There are strong forces at work in the

National Science Foundation to overhaul precollege and college education in the direction of Computational Thinking becoming a universal literacy. Teachers who have the knowledge and skills to teach computer science can play a major role in this new endeavor.