In recognition of the changing definition of literacy, I offer these thoughts and ideas about multimodal meaning-making in the electronic age. Children are surrounded by media in their out of school lives. From the youngest ages they get information about the world from television and the Internet and the many and ever increasing streams that help to define our world. That information stream consists of words and text, certainly, but it is more and more surrounded and supplemented, and sometimes replaced, by graphics, images and video - visual content that reflects and expands the meanings taken from the message.

So, if traditional literacy involves both making and taking meaning from text, so-called "new literacies" must involve the same free reciprocal engagement with multimedia, multimodal meaning making tools. You're not truly "literate" in the classic sense if you can only read, but not write. New literacies, involving sometimes highly technical modes of making meaning, require production as well as consumption.

Our experience of the arts is mediated by new technology. In earlier times the technology was in the hands of the artist. Viewers saw, heard, felt what was created. Now the mediating tools for “doing art,” to use Elliot Eisner’s term, are often in the control of the participant. Poetry is word-processed, music is sampled, recorded

drama is edited Ever expanding arrays of tools--blogs, wikis, mashups, podcasts, virtual worlds, video games, social web sites, etc.—multiply the possible modes of artistic experience, expression and understanding. The painter's brush and canvas are represented by the artist's mouse and hard drive. The dancer's line and movement are echoed in the camera work and computer animation. The media arts involve us in a broad spectrum of the arts disciplines. The role of the media producer is to relay the performance to a wider audience, perhaps, at a later time. The point is that line, texture, color, presentation, and other aesthetic values, all count the same. How can educators stay ahead of their students and harness these popular developments for educational purposes? The authors presented in this issue are at the forefront of technology integration with arts in education.

In the Nelson & Norton-Meier contribution, students who did science projects with the rhythm and rhyme of songs they wrote and recorded about the concepts discovered, were learning in science class. They engaged new ideas in several modes. First, they observed and then did the activity, then they wrote about it, then they made it rhyme. Adding a melody, they had a song, for which they used electronic instruments to play and to record themselves singing about the science activity. The kids reported learning a lot of science facts

as song lyrics recorded on discs. The authors write, "…music composition when used in conjunction with inquiry-based science offers a unique opportunity to uncover and refine student learning. While the use of recording technology assisted in lifting the project to a more authentic and memorable level."

Eidshiem's article takes us into the world of audio recording, a highly technological environment with very high standards for quality output. Such an environment is quite expensive in the real world and is often very hard to replicate on a college campus. The ability to do audio studio work is very important to arts technology education, however. This study regards an innovative computer-mediated audio production studio, a simulator, which addresses the cost-factor, and therefore equity issues, involved in high-end electronic equipment. Eidsheim discusses the use of simulators in teaching, and the importance of using technology to extend classroom possibilities.

Mila Parrish's iDance: Arizona videoconferencing project reaches rural communities. In this exciting project, Web 2.0, the broadband Internet, is used in service of outreach from a major university to dance education students in five rural schools.
Teleconferencing is brought to a new height as a medium for connecting with K-12 students in a broad spectrum of dance contexts: composition, performance, technique, and analysis. Our volume

includes video of the iDance program at work in an elementary school and a middle school that make the case nicely for this application of technology. Parrish's paper describes the planning and adjustments made to create meaningful pedagogy in a new mode. "As videoconferencing facilities become more a part of our educational infrastructure, the potential for new connections within dance and other arts disciplines will expand to serve the needs of the students."

The Technology in Arts Education section will continue to be a part of JLTA. We invite submissions on a regular basis for those who would like to share their work in this exciting field. Other important questions still remain.

- What new art forms have come into being that would not be possible without technology?
- How do we train teaching artists to integrate technology and aesthetics?
- Can multimedia digital arts be considered a new discipline?
- With the explosion of digital arts resources, how do educators maximize their potential for enhancing student learning?
- What new opportunities has technology opened up for students to share their creative activities with others?
- In what ways do virtual communities create new venues for artists to interact with audiences?

- How has technology affected the museum and/or concert experience?
- What advantages (and drawbacks) are there to preserving live performance through audio and/or video recordings?