From the Editor

Thoughts on the Electronic JTE

Lately, I have begun to wonder if the *Journal of Technology Education* is a printed journal that is also available electronically, or an electronic journal that is also available in print. Since its inception in 1983, the JTE paid subscription list (for the print version) has grown to about 550 professionals in more than 15 countries around the world. While not a particularly large following for a professional journal, this number represents the majority of those who call themselves "technology teacher educators," the group toward whom the JTE was originally directed. Now, however, with the advent of the electronic version of the JTE, the audience has become quite a bit larger.

In the fall of 1991, Associate Editor Jim LaPorte and I met with the Scholarly Communications Project (SCP) here at Virginia Tech. They were interested in providing technical support for the publication of scholarly electronic journals and we were interested in reaching a larger population. Thus, when Volume 3, #2 of the JTE went to press in early February, 1992, I began working closely with the SCP to publish an electronic version of the JTE (hereafter referred to as the E-JTE). Together, we worked out a variety of formatting and technical considerations that would enable electronic publication of the Journal. Since there were literally only a handful of scholarly electronic journals at that time, we were "making it up as we went along." About a month later, when the hard copy version was rolling off the presses, the electronic JTE was on-line and accessible around the world via an electronic distribution scheme known as "listserv." This fact was noted in the hard-copy version, and promoted on the internet electronically.

The E-JTE was, from the beginning, an experiment of sorts. While only a small percentage of technology education professionals were actively using internet, the idea of worldwide distribution was very attractive. We went into it with a "what can we lose" attitude. What we didn't realize was how much there was to gain!

Now, less than two years later, one *could* describe the Journal as an electronic journal that is also available in print, rather than the other way around. For the first time, I am consciously aware of the fact that the majority of those reading these words are likely reading a computer monitor, rather than the

¹Listserv is an electronic mail distribution system on the internet.

printed page. If you think that isn't the case, consider the following statistics on electronic access of the E-JTE.

At last count, we had 1160 subscribers to the E-JTE listserv. Each time a hard copy of the JTE is released, these listserv subscribers all over the world (you know who you are) automatically receive an electronic notification of the E-JTE, just as they would receive any other electronic mail message. Listserv subscribers may then use the "get" command to retrieve any of the articles in a particular issue as a file or as an e-mail message.

While there are roughly twice as many E-JTE listserv subscribers as there are subscribers to the JTE in print, listserv access represents only the tip of the iceberg. The E-JTE is also accessible electronically via a number of other now-popular internet access strategies. These include FTP, Gopher, Wide Area Information Server (WAIS) and World Wide Web (WWW).²

The electronic access data for calendar year 1993³ are illuminating. In addition to those who used listserv to acquire the E-JTE, 4679 individuals retrieved E-JTE files using FTP. An additional 6018 "gophered" to the JTE, and 1783 individual WAIS searches resulted in 13,601 E-JTE file retrievals. Thus, a total of 13,640 individuals retrieved some 24,298 E-JTE files during 1993. Dividing by two to take care of the fact the E-JTE is issued twice a year, that suggests about 12 times as many individuals accessed the Journal electronically as picked it up out of their mailbox! And with the exponential increase in internet use of late, these figures will undoubtedly be surpassed in the coming year.

It is important to note the differences between the two audiences. Excluding libraries, virtually all of those who purchase the JTE in print are professionals in the field now known as "technology education." Their primary task is teaching the youth of the world *about* the many different technologies that confront them in their daily lives. These include communication technologies such as computers, print and broadcast technologies; production technologies (e.g. robotics, computer control, the materials and processes of industry, etc.) power and transportation technologies, and so forth.

I mention this for the benefit of the E-JTE readers, most of whom are *not* in the field of "technology education." While I do not yet have hard demographic data on E-JTE readers (I'm currently in the process of finalizing a survey to collect these data), it *appears* from my analysis of the listserv subscription list that you electronic readers are librarians, computer scientists, tech-

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²For those unfamiliar with these internet access strategies, FTP (file transfer protocol) is an internet utility for transferring files from one computer to another. Gopher is a menu driven system for accessing text and other data on the internet. WAIS is a full text indexing and natural language query system and WWW is a hypertext system that allows access to digital text, graphics, audio and video files.

³All data are from January-December 1993, except the Gopher data, which are from March-December 1993.

nologists, computer hackers, and above all, very curious people from all over the world (please forgive me) "hitchhiking on the information superhighway." My guess is that many of you did a keyword search on "technology" which caused a "hit" on the E-JTE or else you thought the E-JTE might be a journal for and about computing education.

Regardless of how and why you internauts landed the E-JTE on your monitor, I am delighted you are giving the Journal a look. Though this Journal is not about computer education specifically, I think you will find articles here that relate to computer education, since technology teachers teach more computing applications in grades 6-12 than do any other school subject teachers. In this issue, for example, you may find Susan Seymour's article on Operative Computer Learning of particular interest. But you will also find articles and research relating to all aspects of technology education, not just the computer component.

Since spring, 1992 when the E-JTE was first released, our subscription list for the printed JTE has roughly doubled, so perhaps some of you are subscribing to the JTE after reading the E-JTE. Obviously, there are advantages to each. The printed version provides "off the shelf" access and a more lasting record, while the E-JTE currently costs nothing and may be accessed readily from around the world.

Electronic distribution of the Journal has thus far been very successful. But it is unrealistic to think that electronic information will remain free forevermore on the internet. The question as yet unanswered is, who will in fact pay for electronic dissemination of information? Or, more specifically, who will pay for the E-JTE? The two professional associations that sponsor the JTE (the International Technology Education Association and the Council on Technology Teacher Education), among others, are interested in the answer to that question. For now, of course, you E-JTE readers don't have to make this call. But sometime soon you may have to decide if you are just hitchhiking, or are willing to pay bus fare. Until then, we are delighted to have you along for the ride.

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Letters and editorials relating to the issue of charging for the E-JTE or any other topic of interest to JTE readers may be sent directly to Mark Sanders, JTE Editor via msanders@vt.edu.