Dear Government Official:

More than a hundred years ago, the United States set about to create a system that would provide basic educational opportunities to all children. We were reasonably successful, and the system served our country well. It accommodated millions of immigrants; it helped us become a world power and the world leader in science and technology.

Sadly, relative to our needs, the quality of our educational system has eroded badly over the past two decades. The educational demands being placed on our adult citizens have grown rapidly, outpacing progress in our educational system.

Now, about one-fourth of our students are dropping out of school. Many others graduate with totally inadequate basic skills and higher-order thinking skills. They are not prepared to deal with the pace of change in society or to solve the types of problems they encounter at home, at work, and at play.

This educational crisis cannot be solved by actions of state and federal government leaders alone. However, such leaders can and must play a major leadership role. Here are a few examples of things you should be doing:

1. Confront and solve the financial equity issue. There are many school districts that have a per-pupil budget of less than half of the national average. These school districts cannot afford to have adequate facilities and to adequately pay their teachers. They have difficulty in attracting qualified teachers, and they cannot afford the staff development expenses to maintain the quality of their staff. This financial inequity is particularly troublesome as our schools work to provide students for adult citizenry in the Information Age. Computers and computer-related technology are simply too expensive for many schools. Equal access to technology is an absolutely essential aspect of addressing the issue of equity in education.

2. To a large extent, our educational system is driven by assessment or testing instrumentation. Standardized objective tests may have been adequate to fit the needs of a school system focusing on minimal basic skills. However, our current testing system is totally inadequate to deal with the higher-order thinking skills, cultural diversity, and rapidly changing technological aspects of a good modern school system. For example, suppose that a school places great emphasis in having all of its students become adept at writing using a word processor and in using a computerized information retrieval system as an aid to solving problems. It seems only logical that these students should have access to such computer facilities when taking state, national, and college entrance tests. Sadly, such is not the case.
3. Distance education is bringing a new dimension to our educational system. Both students and teachers can receive instruction beamed over the airways. Students in a small rural school can have the opportunity to take a physics course or study Japanese, even though the school does not have teachers in these subjects. Teachers can be given access to a wide range of staff development opportunities.

Often such instruction is provided by instructors located in another state or perhaps even another country. Currently there are innumerable local and state political and regulatory barriers to distance education. These can only be removed by state and national action on the part of regulatory and governing bodies.

4. On a nationwide basis, our teacher training institutions are woefully under-funded. They do not have the resources to acquire the facilities and train their staff to provide a modern introduction to technology in education. At both the state and the federal level there is a crying need to redirect some of the funds that are going into education.

5. One of the most powerful messages that has come from business and industry is that workers are more productive when they are empowered. Quality circles and site-based management are very successful. Our schools and school systems have been slow to adopt these ideas of empowering teachers and students.

6. Every state faces the issue of state versus local control of schools and the school curriculum. There is powerful evidence that education can be improved by an appropriate balance between site-based management that empowers teachers, and statewide standards for appropriate accountability. The United States as a whole must move rapidly toward national standards of accountability.

While this list could easily be extended, the message should be clear. Governmental leadership at the state and national level must address major issues such as inequities in access to technology and quality education. They must invest in the future of our educational system by providing better funding for teacher training programs. They must insist on all students having good access to a high-quality educational system. The International Society for Technology in Education has a mission of working to improve our educational system. This professional society stands ready to help you as you work on dealing with the types of issues addressed in this letter.

Sincerely yours,

Retrospective Comments 12/07/2004

All eight of these "letters" were written before the beginning of the publication year. Thus, it was relatively easy to work out the design and content issues to gain the consistency that I wanted to run through all eight letters.

I took me many years to come to understand some of the underlying political aspects of education. I suppose that this was because I grew up in a college math-oriented home, with both
my mother and my father being on the faculty in the Math Department at the University of Oregon. I tended to think of math as being "God given" and more or less the same throughout the world. I also tended to think that the contents and methods aspects of math teaching were relatively similar throughout the world.

In other words, I was terribly naive about our educational system at the time I first begin to teach teachers and work to make improvements in our educational system. (This occurred in the summer of 1965, when I taught in a NSF-funded summer institute for teachers.) I had the attitude that if I could help teachers learn about computers in education, then they would quickly make changes in their teaching—in the curriculum content, teaching processes, and assessment. I thought in terms of limitations of computer access being the prime barrier to the accomplishment of these goals.

It took me many years to gradually realize that our educational system is a "system" that has great stability and resistance to change. I read articles that discussed the idea that a significant change in our educational system takes 50 years or more. Moreover, in retrospect we might well laugh at some of the changes that have taken that long. When I was in elementary school, we had desks that were arranged in rows and bolted to the floor. The desks I used looked like they had been used for a very large number of years. Now, this fixed row arrangement of desks in elementary schools is mostly gone from schools in the US.

When I wrote the eight editorials for the 1990-91 volume of Learning and Leading with Technology, I though I had a good understanding of the need to communicate with a wide range of stakeholders, and the need to have their support in efforts to improve our educational system. The International Council for Computers in Education reprinted this sequence of editorials as a small booklet, and a large number of copies were distributed for free. In addition, I inserted the collection of editorials into a book—The Technology Advisory Council—that I wrote in collaboration with seven students in an advanced seminar.

In terms of the feedback that I received, I must conclude that most of the distribution of these editorials fell of "deaf ears." I received a little feedback expressing appreciation for the letters. But, I don't recall receiving any feedback sharing stories of changes resulting through use of the letters.

However, I suspect that these letters may have made at least some contribution to changes that have occurred since they were written. The last of the letters contains six recommendations to government officials. There are listed in brief form here, along with brief comments.

1. Confront and solve the financial equity issue. The Digital Divide has been, and continues to be an active issue in education.

2. To a large extent, our educational system is driven by assessment or testing instrumentation. … It seems only logical that these students should have access to such computer facilities when taking state, national, and college entrance tests. Sadly, such is not the case. Progress has occurred in terms of use of calculators on tests. But, we are not seeing much progress on "open computer" assessment.

3. Distance education is bringing a new dimension to our educational system. Substantial progress has occurred in the development of distance learning at the precollege level. It seems clear to me that this is a "megatrend" and that
such use of ICT will continue to grow. Many states have made significant steps to implement and/or facilitate distance learning within their schools.

4. On a nationwide basis, our teacher training institutions are woefully underfunded. They do not have the resources to acquire the facilities and train their staff to provide a modern introduction to technology in education. The Preparing Tomorrow’s teachers to Teach Using Technology funding from the US Department of Education has provided a very large amount of help in addressing this problem.

5. One of the most powerful messages that has come from business and industry is that workers are more productive when they are empowered. Quality circles and site-based management are very successful. Many schools now make use of site-based management. However, there is still a huge gap between the potentials of ICT that have been achieved in business and industry, and the potentials that have been achieved in teaching.

6. Every state faces the issue of state versus local control of schools and the school curriculum. There is powerful evidence that education can be improved by an appropriate balance between site-based management that empowers teachers, and statewide standards for appropriate accountability. The United States as a whole must move rapidly toward national standards of accountability. I have quoted this last item in its entirety. Unfortunately, I am quite unhappy with the "No Child Left Behind" approach that has been used to address this recommendation. I now have considerable better insight into the difficulties in trying to improve an educational system on a nationwide basis. I believe quite strongly in the ideas of empowering teacher and empowering students.

In summary, my six recommendations to government officials could be considered as a prediction of the future. As a set of predictions, the list seems relatively good. Unfortunately, I am not too happy about some of the outcomes.

David Moursund, December 2004