America is changing from an industrial age to an information age wherein a premium is placed on the rapid acquisition, assimilation, and use of knowledge. Instructional technology offers the field of education an unprecedented opportunity to emphasize learning, increase teacher productivity and make more effective schools. Educators must face the reality that educational reform and technology are going to require a new way of looking at teachers, the teaching profession, and instructional methods. It is going to require a rethinking of the structure of the educational system to include more instruction outside the traditional four wall classroom, allowing more education in the home and in community centers. Computers will be able to assist in remedial work and higher skill work, and in record keeping and monitoring of student progress which will free the teacher for other tasks. Technology will require a higher level of skills of teachers; they will need to know the tools (e.g., microcomputers, videodiscs, cable television and slow scan television) and how to use these tools effectively for such tasks as remedial work, building word vocabulary, or tutoring possibilities. Technology must be integrated into the educational program, and its use for both technological goals and educational goals must be maximized. This will require making necessary changes and adjustments to improve the current model or make a new one. Finally, educators need to be opportunity oriented, not problem prone, in focusing on technology in education. The result will be a more productive, more efficient and more effective educational system delivering learning to all areas of the population. (DJR)
"Excellence in Our Schools: Differences That Count"

The Secondary School Recognition Program
Southeastern Regional Conference

May 14, 1984

Law Center
The University of South Carolina
Columbia, South Carolina

Remarks as Chair of General Session 3
It is a pleasure to join such a distinguished group of educators focusing on how to make our schools better and our schools more effective as learning institutions.

Slightly more than one year ago - April 26 - the National Commission on Excellence in Education issued its report on the American educational system A Nation at Risk.

That report served as a firebell in the night—an alarm awakening the American people to a real and present danger in our educational system.

The crisis identified focused on a rising tide of mediocrity in our educational system which threatens our national economy, our international competitiveness and our traditional concept of the American dream of a better life and a better education for the next generation.

Last Friday, the President of the United States recognized 60 students awarded a Presidential Academic Fitness Award. These students were representative of over 220,000 students—graduating seniors—who have received recognition for their academic achievement.

Along with this ceremony, the U.S. Education Department released a book The Nation Responds — a view one year after A Nation at Risk of efforts throughout the United States to improve the American educational system.

We have had many activities including the secondary school recognition program.

Education has been highlighted in the media.

Focus on educational achievement has become prominent.
Once again after decades of neglect education has been placed on
the national agenda.

But where do we go from here?
This conference is an important start.

However, after a few reports, conferences, and a year of reflection
we cannot just declare victory and go back to business as usual.

The "quick fix" may be what we prefer but it gets only short run
headlines but few lasting results.

We have only begun the journey for educational reform; we have a
long way to travel on that road.

From the frozen forests and sparse population of Maine to the warm
climate and bustling urban centers of Southern California, from the
woodlands of northern Oregon to the tropical swamps of Florida, from the
vastness and isolation of Alaska to the warm beaches of Hawaii, we are
witnessing a great tide of interest, activity, reform and change in
education sweeping across our land.

We as educators must make sure, to use a metaphor, that this great
stream of educational reform doesn't slow down to an inconspicuous
trickle.

We must be willing to make the careful examination needed for our
educational system to reform.

We must must be willing not just do more, but do things
differently.
In a cafeteria approach to learning, we must be willing to offer more substance - more meat and potatoes - and less on the frills - the desserts.

Our students are making better grades on less substantial courses academically than our students were doing twenty or thirty years ago.

We must be willing to assume the national and international challenge to our educational system. We know what has happened to our automobile and television industry; we can't let this happen to our microcomputer industry.

Let me say a word on the challenge educational or instructional technology offers to all of us to improve education — and to warn of some of the obstacles.

The basic facts are these:

1. The computer is a given; it is here to stay.

2. Herbert Simon, University Professor at Carnegie-Mellon University, has noted that the computer is not just a one in a century innovation; it is not just one of the instant revolutions announced daily in the media or on television; it is a one-in-several-centuries innovation.

3. The computer is different from educational television. The latter requires the passive learner. The interactive nature of the computer offers a wide array of interesting learning experiences for the student. It enhances and elevates learning.
4. The new technologies give us the greatest opportunity to realize a long cherished goal (strongly recommended by the National Commission on Excellence in Education) to make ours a lifelong "learning society."

5. We have witnessed great developments in the computer in a relatively short time. We have seen a reduction in size, an increase in capacity and a rapid decline in cost. The full size room computer has been replaced by the desk top model; the old vacuum tubes have been replaced by the silicon clip; the price tag of tens of thousands of dollars has been replaced by costs of a few hundreds or a few thousands dollars).

6. We are moving—in our country, in the continent, in the world—from an "industrial age" to an "information age" where a premium is placed on the rapid acquisition and assimilation and use of knowledge.

This change to an information society brings us to a key factor that John Naisbitt identifies in *Megatrends*.

We have an economy based for the first time on a key resource which is not only renewable but self-generating. Running out of this new resource is not the issue; drowning in it is. We are drowning in information but starved for knowledge.
7. Technology - instructional technology—offers all of us something new and dynamic in the field of education — an unprecedented opportunity

1) to emphasize learning
2) increase teacher productivity
3) make more effective schools

And the greatest obstacles on this horizon?—Ourselves!

We must not treat technology as a fad — which we can add on to our classroom — like recess or a field trip; or something if we ignore, it will go away (e.g. the "stop the world, I want to get off" syndrome); or turn classrooms into huge video arcades.

We must face the reality of education reform and technology

1) it is going to require a new way of looking at teachers, the teaching profession, and instructional methods.
2) it is going to require a rethinking of the structure of our educational system
3) with electronic learning, we may witness more instruction outside the traditional four wall classroom allowing more education in the home and in community centers.
4) computers will be able to assist in remedial work and higher skill work and this will free the teacher for other tasks.
5) technology can assist in record keeping and monitoring of student progress — again freeing teachers and administrative staff from menial and burdensome tasks.
6) technology will require a higher level of skills of our teachers.

7) we must not expect to fully utilize the potential of technology -- many uses we can't even imagine -- if we stay wedded to the traditional concept of the classroom and the teacher with a captive audience of 30-35 students for 6-8 hours. (For example, card catalogues in our libraries have been replaced by microfiche readers; students will soon be able to do search on computer for books in other libraries from home as well as in the library).

Librarians are becoming more than librarians; they have become information scientists and specialists. However, students are able to do more for themselves).

8) we get so committed to structure and bureaucracy that we are unlimited in action and stifled by conformity.

9) Even when bringing education to Third World nations, we seem hung up on the structure--the teacher and classroom, the principal, the superintendent for schools--rather than concentrating on the quickest and most direct and most efficient delivery of educational services.
Computers may be better in building word vocabulary of older students. Computers may be effective tools for remedial work in mathematics and reading. Students may be able to tutor one another. We must be willing to recognize a changing role for the teacher.

We must know the tools:
- microcomputers
- videodiscs
- cable TV
- slow scan TV

We are entering the age of the electronic university - where the confined can teach the confined -- e.g. a nursing home resident can tutor a prisoner.

1) We need to integrate technology into the educational program; a technology agenda means maximizing its use; we must use it for educational goals and objectives and know how to use technology to achieve them. These could be contradictory; they should be complementary. Technology goals and educational goals should be the same.

2) We must be willing to make necessary changes and adjustment -- not just improving the present model -- but be willing to make a new model.

4) We should not ignore technology but we also don't need to oversell it.
5) Finally, we need to be opportunity oriented, not problem
proned, in focusing on technology in education. The result will
be a more productive, a more efficient, and a more effective
educational system delivering learning to all ages of our
population.