

*Singapore, 2001:
Symposium on E-Learning*

Opening Keynote Address: Changing the Shape of Education

Florence McGinn

*former United States Commissioner,
Web-based Education Commission
GKE, Senior Executive Vice President of Research
1998 United States National Technology &
Learning Teacher of the Year
Princeton University's Distinguished Secondary
School Educator Award*



Thank you to Singapore's National Institute of Education, the School of Communication Studies, and Nanyang Technological University for allowing me to address the sizzling focus of empowering today's learner through education's most powerful catalysts, the emerging technologies and the Internet.

A special thanks to noted visionaries NIE Director Leo Tan, who so impressed me at Singapore's Conference 2000, and Secretary General Vijay Menon. Both these action-oriented futurists have graciously joined us today. Thanks also to Dr. Philip Wong, who was in the United States in May with a dedicated Ministry of Education task force led by Director Mr. Chan Tee Miang to meet with GKE CEO James Chang and myself on the vision of empowering today's learners in innovation and Information Age processes.

I'm pleased to join at this Symposium with visionaries such as Australia's John Hedberg, Editor and Dean David Hung, Knowledge Platform's Chief Learning Officer Pat Lambe, NIE researcher Lim Cher Ping, GKE CEO and ComWEB founder James Chang, and IT Technology Source board member Dr. Tan Seng Chee.

"Vision is the art of seeing things invisible."

Jonathan Swift

English author of GULIVER'S TRAVELS

Education needs visionary audacity to meet its worldwide demands. Record breaking numbers of children are in the world's schools making this a time of opportunity and challenge. All eyes are upon education.

And at this time of the beginning of a new millennium, education's visionary goals are given tangible reality in the laughter and empowerment of Information Age learners, whether children, university students, or adults seeking fresh skills.



***One World, One Classroom:
Empowering the Dream***

It is pivotal, and changing education's future will demand uncommon genius to birth education's new forms. Transformation demands breaking out of thick-walled boxes of old forms, re-shaping methodologies, and changing regulations and policies as well as penetrating those walls that lie within us, old prejudices and old expectations.

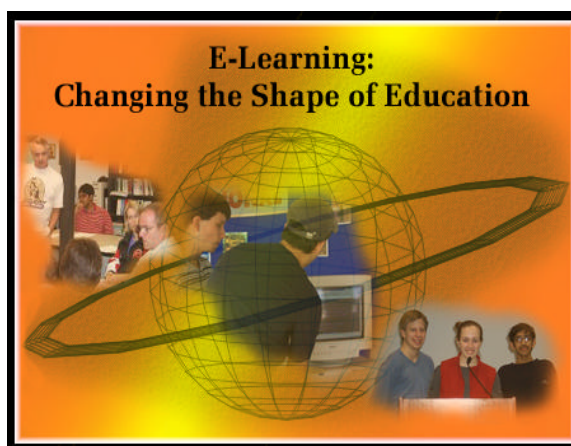
Education's transformational work will be in a shifting landscape where educators, parents, industry, and policy makers must be results-oriented. Getting superior results will demand innovation and evolution and have education's champions working with things we never thought possible. It will demand the joined, collaborative resources of many groups.

For example, let's consider an industry item such as AIBO, Sony's robot dog that might seem like a \$1500 extravagance. But, already his price has dropped steeply, and imagine . . . could he eventually be used as a learning tool?

After all, in May, AIBO became bi-lingual . . . the canine bot now can read your e-mail or pre-selected web pages in different languages in six, different male and female voices. Might that help an audio learner or assist in foreign language study for young learners? One day, AIBO could have a GPS locator, so a young student could take him exploring on a science field trip, and AIBO could assist in safe exploration and mapping. And the camera in his nose that he uses to sense where his ball is? That could take the field trip snapshots, assist in providing image documentation of research, and post the action and the data automatically to the school website. For the committed audio learner, I imagine that AIBO could be taught to give a canine reading of Robert Frost!

Learning's experiences are going to change. There will be no going back. And, in imagining education's future, we must not imagine that the computer will always be a box sitting on a school desk or even that students will always, physically, be in the same room with the content specialist.

E-learning . . . will be exploring and dreaming to make the creative act and information analysis an expressive encounter with meaning. E-learning will be a mentored and individualized process. The empowered learner will be focused on innovation fueled by real decision making.



Technology dissipates limits. Information and choice are this generation's nuclear power.

There is a global need. Singapore, although geographically small, has elected to lead in education. In the electronic world, acres will not be the measure of wealth. The ability to empower knowledge, the creative skill of leading innovation in the emerging technologies, the deployment of enabling policies and systems, and the insight and commitment to come to product will be the new measures of success.



As a former United States commissioner focused on e-learning, I know this commitment is a shared vision.

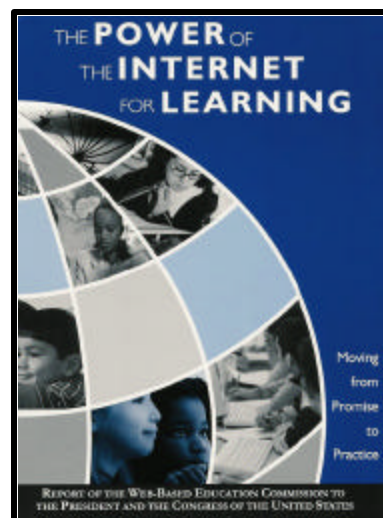
The Web-based Education Commission's full research report has been actively shared with the President, every member of the United States Senate and the United States House of Representatives. The Commission's report is entitled "From Promise to Practice" to reinforce our commitment to action.

It is available to the public, on-line, from the US Dept of Education's own site

<http://www.ed.gov.Technology/index.html>

as well as the Commission's web site

<http://www.webcommission.org>.



Its concepts link closely with the Four Years of Reports made available by the United States CEO Forum.

Also, the Web-based Education Commission report's concepts are shared in the United States Department of Education's own National Technology Plan, "E-Learning: Putting a World Class Education at the Fingertips of All Children," that is also available on-line.



For those unfamiliar with the Commission, it was created through legislation by both the President and Congress. The resources of the US Dept of Education

were made available to us for our legislation to hold hearings



study, and we were charged by throughout the United States . . . to get

a full picture of our nation on this issue . . . and authorized to take testimony from experts and stakeholders. We were charged to provide policy recommendations as well as a full research report to the President and to Congress.



Its membership was committed to education's vision and was bipartisan. The commission's body had five legislators: the co-chairs were US Senator Bob Kerrey and US Representative Johnny Isakson. Adding to the important legislative depth of the commission were US Senator Jeff Bingaman, US Senator Mike Enzi, and US Representative Chakah Fattah

Other members included John Gage of Sun Microsystems, Alan Arkatov Chairman of OnLine Learning, and Richard Brown, Director of the online Walden University and Douglas King, President of the St. Louis Science Center, and Richard Gowen, President of a brick and mortar university committed to Digital Age innovation with a state-wide web presence. I joined others, and the commission comprised 16 commissioners in all to examine K-12, university, corporate, and adult E-learning Issues.



The Web-based Education Commission was supported by extraordinary staff that included David Byer, former Vice President of Government Affairs of the Software Information Industry Association and now with Apple Computers, Kathleen Fulton an outstanding, national researcher now with her own private consulting company, and Irene Spero, now Executive Director of SchoolTone Alliance;

The important thing is not to stop questioning.
Albert Einstein

We learned the critical importance of inquiry and exploration in order to discover the depths of local, regional, national, and global barriers and problems. And we learned the importance of working together to shape vision and policies of action.

In our final report, almost 200 pages in length, we still could not address all the issues brought before us. The complex issues of the Internet and education increase in importance with Information Age rapidity, but the impact of these issues holds resonating power for local, regional, national, and international education in their potential for customizing learning and increasing equitable access to knowledge and its opportunities.



However, we synthesized our recommendations into CALLS FOR ACTION to deal with key issues:

- A. The vital importance of establishing universal access
- B. The critical importance of training and support not only of teachers in the ranks but also support for teacher education in our universities, community opportunities and training for adult learners and facilitators.
- C. Highlighted the importance of Research and Development to provide a grounded understanding of human learning in the Information Age to support depth in the development of new learning environments and successful methodologies.
- D. Emphasized the need for successful, technology-supported content available for all learners
- E. Recognized that unresolved legal issues and barriers created for conditions related to an earlier era were impacting this area and needed examination and adaptation.
- F. Noted carefully issues of safety for our learners
- G. Emphasized the issue of funding through government, private, and public venues of collaboration

The importance of the Internet in a rapidly changing environment was at the forefront of our issues. Change is on us . . . in America, only 16% of our university population are even traditional students . . . the old image of the university student as a fresh high school graduate supported by Mom and Dad is not the only, or even the major, reality.

We are poised between the past and the future . . . challenged to reinvent, redesign, and reshape rapidly . . . OR lose a generation of learners.

The report of the Congressional Commission on Web-based Education is out, and it is a part of public record. It is our hope, as we continue to advocate for its issues, that it will “set a climate” for innovation and growth.



It is not a question of “if.” Technology’s opportunities will redefine the educational experience. Already, US schools are currently spending \$2.2 billion dollars for online education – a figure Merrill Lunch predicts will leap to \$7 billion in 2003.

The only question is who will lead, who will be the creators for that future? Will the shape of education’s future be a choice made by human facilitators capable of innovating or will it be chance shaped by the violent winds of unstudied action.



The United States Web-based Education Commission sincerely hopes that our extensive efforts have created a catalyst for choice and creation, a map and a direction. And, if we are very fortunate and have done our job well, we have created a path of inspiration to action.

And, it is a collaborative path, for active groups such as the United States CEO FORUM with participation from key industry stakeholders has reports that reinforce our recommendations.

The CEO Forum's Year 1 report has a self-assessment tool for K-12 schools. In the Year 2 report, the CEO Forum provides insight into Teacher Development. The Year 3 report provides a self-assessment tool for university schools of education. And, the newly released Year 4 report deals with testing and accountability.

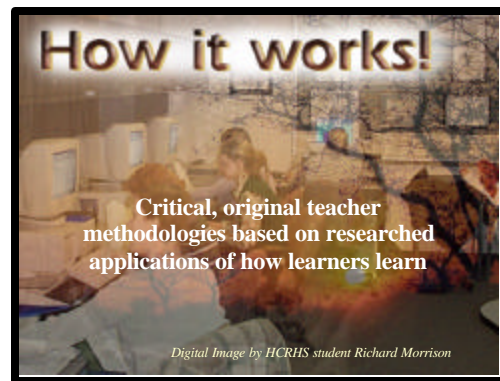
The new United States Educational Technology Plan updates its important, 1996 plan, "Getting America's Students Ready for the 21st Century." The new plan's development involved educators, administrators, policy-makers and the private sector, and it is hoped that its five educational technology goals provide a national roadmap.

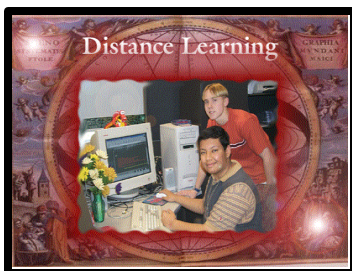
The visions of these reports echo and support each other's basic premises. Collaborations of ideas and action can serve as the catalyst for education's empowerment. The convergence of technology and the needs of education in an Information Age moves all agencies beyond isolation.

From the uniformity of electrons, educational technology must distinguish itself as a collaborative, customizable learning environment. We must re-imagine ourselves to create and equip lifelong learners, who needs expansion and participation in the learning process.

And how can we best assist this type of learning process. What might E-learning's future look like?

Students entrance concepts such as Harvard researcher Howard Gardner's multiple intelligences theories, Ed win Schlossberg's concepts of audience, Barron's theories of creativity and process, MIT researchers Negroponte and Papert's theories of innovative play and digital culture, theories from Stanford University that are in books such as The Media Equation, all added to their own learning strategies to achieve personal learning goals organically linked to curricular achievements.





Electronic conferencing with full audio and video creates an environment that shatters traditional barriers within a process achievement-oriented enough for students to internalize and integrate academic concepts as well as flexible learning strategies.

And, an international model is critical to education's new vision. In projects based upon strategies that are embedded in the GKE Learning System, learners from the United States connected to Dianye School in Beijing China. Classrooms connected between an urban and a rural high school. High school students connected to elementary school. School students connected with senior citizens. And, experienced teachers connected to student teachers

In a technology-assisted, 24 hour/7 day a week learning environment, the empowered learner is fueled to in-depth achievement by choices and self-initiated commitment, capable of the engagement of multiple roles.

The craft of creation builds tomorrow's skills. ELECTRIC SOUP is an award-winning project that began in 1995-96 with 11 student editors, and came to involve over 60 student editors and has increased in size and numbers of features three fold.

In that project, I guided the development, the value creation, and the facilitation of creative learning processes into powerful demonstrations of understanding and product achievement through innovative strategies based upon the emerging technologies while students were focused on curricular concepts in the humanities: poetry, short stories, essays, music, archetypes, and world literature. Students moved through facilitated process to strength in leadership, in Information Age skills, and in original innovation and creation.

Students in the United States had learning and in-depth experiences with writers and learners in China, Korea, Italy, South Africa, Germany, and many, other international sites. Many of the award-winning global projects received the international facilitation of GKE.



That type of learning redefines the educational experience, and it is these fresh collaborations that will shape education's future. A cyberspace learning environment combines with a physical one in a natural convergence that moves us from the possible, to the probable, to the preferable for each learner.



It enhances experiences and interactions to heights of involvement such as learners sharing skills as teachers, learners interviewing international leaders, and learners launching the demonstration of skills that not only meet but also surpass established standards.

The modern learning environment is a collaborative one where students shift easily between roles of learner, explorer, and teacher, passive and active, interactive and independent.

Senator Bob Kerrey asserted with courageous vision and commitment to every learner's opportunity that "It is not a question of 'if.' There is no choice." United States Senator Bob Kerrey urged meaningful action for the sake of today's learner. John Gage from Sun Microsystems stated eloquently that "Someone has to do this for the learner. If not us, then who is going do it?"

The children demand of us that we join them as dreamers of a fresh, original, global landscape for empowered education . . . to truly change the shape of education's future.

You've been a wonderful audience. Thank you for sharing a dream with me.

These are excerpts from a full, multimedia keynote presentation given for Singapore's Symposium: E-Learning: The Future of Education by Florence McGinn, GKE's Senior Executive Vice President of Research and a former United States Commissioner on the Congressional Web-based Education Commission.

E-mail: fmcginn@gke.com

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