

THE FUTURE OF SOCIAL STUDIES

A Wish List of Seven e-Learning Innovations

By

Joan Vandervelde

Waterloo, Iowa



T

he article "Visionary Predictions Throughout History" (Jukes, 2001) reports the following:

X-rays are a hoax.

- *Lord Kelvin, Scottish mathematician, 1897*

Space travel is utter bilge.

- *Richard van der Riet Woolley, British Astronomer, 1956*

Everything that can be invented, has been invented.

- *Charles Duell, US commissioner of patents, 1899*

Airplanes are interesting toys but of no military value.

- *Marshall Ferdinand Foch, French military strategist and future World War I commander, 1911*

Television won't be able to hold on to any market it captures after the first six months. People will soon get tired of staring at a plywood box every night.

- *Darryl F. Zanuck, head of 20th Century Fox - 1946*

Computers in the future may perhaps only weight 1.5 tons.

- *Popular Mechanics forecasting the development of computer technology, 1949*

I think there is a world market for maybe five computers.

- Thomas Watson, chairman of IBM, 1943

Predicting the future is an imprecise science at best. Even modern technology has not produced a reliable crystal ball. For that reason, rather than a list of predictions, I developed a “wish list” for the future of social studies.

A Wish List

1. Iowa students will develop the following skills:

- critical thinking and information use skills
- the ability to make ethical, reflective judgments
- creativity, reliability, and responsibility
- problem-recognition, definition, and solution formulation
- international and multi-cultural competence skills
- communication skills
- technological readiness

Foundational to good citizenship, these skills will equip Iowa students to find their place in the increasingly complex social and economic system in which they will live and work. In a recent e-zine article, Ian Jukes and Ted McCain (2001) examined emergent trends that have transformed the workplace even for entry-level employment.

What skills do farmers need today?

A farmer in America, the hero of the agricultural economy, rides in a portable office on his tractor. It's air-conditioned, has a phone, a satellite-driven GPS location device, and sophisticated sensors near the ground. At home, his computer is connected to the never-ending stream of weather data, the worldwide grain markets, his bank, moisture detectors in the soil, digitized maps, and his own spreadsheets of cash flow. Yet he gets dirt under his

fingernails but his manual labor takes place in the context of a networked economy. And the skills he needs are very different than those needed even a few years ago.

What skills do truck drivers need today?

Much the same can be said about the changing role of truck drivers. While the experience of sitting behind a wheel still requires good eyesight, a knowledge of the laws of the road, manual dexterity to make repairs to the truck they drive and knowledge of remains relatively unchanged, there are also the new tools of trucking – bar codes, radios, dispatch algorithms, route hubs, data management systems, time management systems, global positioning satellite systems and even the roads themselves all follow the logic of networks. Why- because companies increasingly use zero based inventory, just in time delivery and computer integrated manufacturing where products must be delivered within 30-minute delivery windows.

What skills do mechanics need?

The historic approach was that mechanics used a 12-pound persuasionometer along with wrenches, screwdrivers and grease guns. Increasingly, mechanics are highly skilled people familiar with computer controlled electronic circuitry, Wide Area Network for diagnostics, electronic manuals, and specialist skills to deal with the daily configuration of electronic manuals. Increasingly, mechanics are problem solvers capable of stating techni-

cal problems, and using high levels of information literacy and numeracy, along with excellent skills in technical reading, interpretation and application to access and search for the answer to problems.

What about the information industry?

Today in the information industry, 44% of all workers and 20% of all paid hours are paid for keyboarding. Consider the impact that PC's have had to date on the information industry. And now, it's about to happen again. Consider for a moment the impact of pen-based and voice input technologies. There is a real danger that a whole sector will be left behind with outdated skills.

This is just a glimpse of pervasive trends. This story repeats itself again and again in almost all areas of the economy – for banking, restaurants, medicine, the fast food industry – the future will certainly not be a natural extension of the past.”

2. Every social studies educator will “feel comfortable online.”

Social studies teachers must know how to use technology tools to teach teamwork, information literacy, problem-solving and critical thinking, as well as how to use computers to increase student enthusiasm for learning. Technology should not drive curriculum, but just the opposite—curriculum should drive technology. Technology should be transparent in the way teachers utilize computers, LCD projectors, scanners, much like an overhead projector or VCR have been used in the past.

Universities need to increase the number of online professional development classes and workshops to model e-learning strategies, as well

as school districts need to increase the local school-based technology mentor programs, to reach the “reluctants”— those teachers having difficulty fully integrating technology into their classrooms.

3. Teachers will have time to modify existing social studies lessons and develop e-learning activities.

Social studies teachers need time to practice integrating Web-based resources and time to reflect on how to continue improving their lessons with technology. After teachers develop a comfort level with computer-assisted learning in a computer lab setting, then districts will need to increase the number of classroom-based computers with simultaneous access to the Internet via high-speed broadband connections to facilitate the increased demand.

4. A centralized repository of high quality Web-based social studies resources that correlate with district standards will be established.

The quality of current Web-based resources varies dramatically from content-rich materials in the American Memories Collection to mediocre, biased personal Web sites, and it's time consuming for teachers to sort the good stuff from the poorly designed material. One centralized social studies database is needed to catalog top-of-the line Web-based learning resources that correlate with social studies benchmarks and standards and meet the needs of diverse learners. An annotated searchable database linked to Web-based geographical, historical, political, and economic primary source documents, interactive maps and tabular data from a variety of fields (raw data) will allow students to research and manipulate digital information via information processing tools (word processors, spreadsheets, graphics and presentation software).

5. The Ten-Minute Lesson Planner will be a reality.

An affordably priced learning management system that can be up and running in a matter of hours is needed to accelerate the growth of e-learning and allow entire social studies departments to easily get started developing and expanding their libraries of “learning objects”. An

example of a learning object is the CampSilos Web site, <http://campsilos.org> which is filled with diaries of pioneers, stories of prairie fire experiences, and links to rich resources about pioneer life in Iowa.

The Wisconsin Online Resource Center's (2001) definition for learning objects includes:

- i. "Learning objects are a new way of thinking about learning content. Traditionally content comes in a several hour chunk called a course. Learning objects are much smaller units of learning, ranging from 2 minutes to 15 minutes."
- ii. "Are tagged with metadata –every learning object has descriptive information allowing it to be easily found by a search."

6. Drag and drop simulation tools will be part of the regular routine in designing social studies lessons.

A drag and drop authoring tool is needed to create social studies simulations. Type in a scenario, such as a projecting the effects of world population growth or predicting the role of China in globalization, and then add simple situations, research resources, actors, and results. Social studies teachers need a PowerPoint type tool that can create simulations by using a simple template. Simulations will be HUGE as a teaching tool and will assist social studies educators in creating very timely content utilizing current events, recent speeches, press releases, or real-time data.

7. Universal Learner Card will be available for every student.

A Learning Card the size of a credit card and read via inserting in a computer port (or an online equivalent) will store each student's profile including learning style to facilitate personalized choices for learners, as well as assess and document academic achievement in a portable electronic portfolio.

To thrive in the 21st century, social studies teachers need state-of-

the-art technology and the training to apply currently successful teaching techniques with new time efficient tools and resources. If these are in place, the future is bright for the social studies—a wish come true.

Recommended Readings

Reusable learning objects (June 13, 2001). Association of Multimedia Communications, e-Learning Archives. Retrieved August 8, 2001 from the World Wide Web: <http://www.amcomm.org/meet/E06.asp>

Learning objects. (2001). University of Wisconsin, Milwaukee: Center for International Education. Retrieved August 8, 2001 from the World Wide Web: <http://www.uwm.edu/Dept/CIE/AOP/learningobjects.html>

Downes, S. (2000). The need for and nature of learning objects. University of Alberta. Retrieved August 8, 2001 from the World Wide Web: http://www.atl.ualberta.ca/downes/naweb/column000523_1.htm

E-learning: putting a world class education at the fingertips of all students

the national educational technology plan. (January 25, 2001). U.S. Department of Education. Retrieved August 8, 2001 from the World Wide Web: <http://www.ed.gov/Technology/elearning/index.html>

Fulton, K. (March/April, 2001). From promise to practice: Enhancing student internet learning. MultiMedia Schools. Retrieved August 8, 2001 from the World Wide Web: <http://www.infotoday.com/MMSchools/mar01/fulton.htm>

Kashmanian, K. (July/August, 2000). The impact of computers on schools: Two authors, two perspectives." Technology Source. Retrieved August 8, 2001 from the World Wide Web: <http://horizon.unc.edu/TS/default.asp?show=article&id=791>

Jukes, I., Dosaj, A., and Macdonald, . Net.Savvy II: Building information literacy in the classroom. The Committed Sardine. Retrieved August 8, 2001 from the World Wide Web: <http://www.thecommittedsardine.net/archive/netsav2.html>

Klopfenstein, B. C. (February 23, 1998). Diffusion of innovations on the web. Retrieved August 8, 2001 from the World Wide Web: <http://>

www.bgsu.edu/departments/tcom/diffusion.html

Mathews, J. (June 5, 2001). Students embrace technology. Washington Post.

Retrieved August 8, 2001 from the World Wide Web: <http://www.washtech.com/news/media/10260-1.html>

McCain, T. & Jukes, I. Windows on the future: Living, working & learning for the new millennium. The Committed Sardine. Retrieved August 8, 2001 from the World Wide Web: <http://www.thecommittedsardine.net/books/windowsintro.html>

McCombs, B. L. (2000). Assessing the role of educational technology in the learner teaching and learning process: A -centered perspective. University of Denver Research Institute. Retrieved August 8, 2001 from the World Wide Web: http://www.ed.gov/Technology/techconf/2000/mccombs_paper.html

Riel, M. (September, 2000). New designs for connected teaching and learning.

US Department of Education: Secretary's Conference on Educational Technology.

Retrieved August 8, 2001 from the World Wide Web: <http://www.gse.uci.edu/mriel/whitepaper/>

Warlick, D. (July 1, 2001). The wicked sheriff. techlearning.

Retrieved August 8, 2001 from the World Wide Web: http://www.techlearning.com/db_area/archives/WCE/archives/warlick2.html

References

Jukes, I. (2001). Visionary predictions throughout history. The Committed Sardine. Retrieved August 8, 2001 from the World Wide Web: <http://www.thecommittedsardine.net/archive/humor1n1.html>

Jukes, I. and McCain, T.. (2001). Education at the crossroads: the restructuring of education, the future of employment & the challenge to education. The Committed Sardine. Retrieved August 8, 2001 from the World Wide Web: <http://www.thecommittedsardine.net/archive/eatc.html>

Wisconsin Online Resource Center. (2001) What are learning objects? Wisc-OnLine. Retrieved August 8, 2001 from the World Wide Web: http://www.wisc-online.com/what_are_learning_objects.htm

Joan Vandervelde is director of the University of Northern Iowa Online Professional Development program.