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INSIDE THIS ISSUE

WFS Futures Learning Session Bulletin

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(See page 11)

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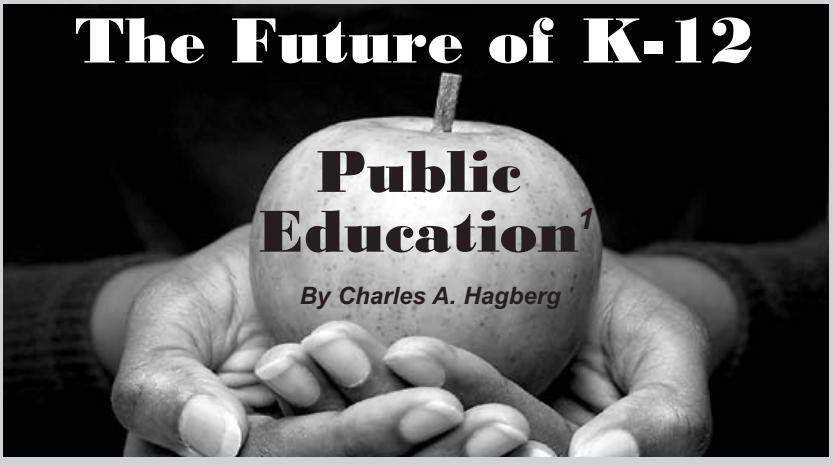
Smart Mobs and Generation X Democracy

PARK'S LAW: "The more broadband penetration, the less is leadership popularity"

by Youngsook Park

From early May to mid July 2008, the broad avenue near Seoul Plaza in Korea was flooded with candlelight virtually every evening. What started as candlelight vigils by ordinary people who opposed the hastily signed agreement on U.S. beef imports evolved into often violent demonstrations marked by chants demanding that President Lee Myung-bak's administration step down. The largely peaceful candlelight vigils were a reminder of the vibrancy of Korean democracy. In June 1987, ordinary Koreans flocked to the same area in front of City Hall, calling for democracy. Twenty-one years later, Koreans from all walks of life were holding candles to urge the government to renegotiate a beef import agreement

See Park's Law, continued on page 4



The present school systems are big unwieldy dinosaurs and the educational planet is on a collision course with the asteroid of the internet. The dinosaur school systems will, after a long struggle, become extinct.

A century ago transportation was primitive. It was the time of smaller schools staffed by teachers who often had two years or less of advanced education called "Normal Training." It epitomized the concept that you don't need an elaborate college education to teach the very young and when students get older they can learn by their own motivation.

As time passed, school boards were organized and parents lost control. Teachers and the school boards imposed stricter standards. Government got involved and imposed legal standards. The end

See Future of K-12, continued on page 8

Mack

From the Desk of Tim Mack, *President, World Future Society*

Instead of doing my usual update of events within the Society (which is doing well, even in these troubled times), I would like to share one of the many projects in which the WFS is invited to participate around the world. This particular one was done in partnership with the government of Singapore, which had created one of the most sophisticated risk assessment and horizon scanning (RAHS) systems in operation. Initially focused on defense issues, they are moving to expand its purview to include economic and social elements, and they wanted advice on the problems they might encounter.

Accordingly, the following is a summary of a presentation made in early October 2008 concerning the obstacles that a more complex scanning system might face. Horizon scanning is the practice of monitoring the operating environment, and tracking the changes in the environment that could have an impact on understanding and managing risk. Understanding change is thus pursued through the systematic examination of potential threats, opportunities, and likely future developments, including (but not restricted to) *those at the margins of current thinking and planning.*

There are three major categories of challenges to horizon scanning. The first is assessment of what levels of data may be consistently available to inform this process, including the quality and comprehensiveness of information resources. The second is analysis of the data chosen, in terms of its relevance and meaning. Finally are methodological dynamics and the potential problems with specific approaches to foresight.

- Data shape is the basic form of data relationships (often mathematical), for example, direct or inverse.
- Data thresholds are discontinuities in data relationships (e.g. catastrophe) where the rules change.
- Data interaction involves the relations between multiple factors that change their effects (sometimes mathematical, sometimes empirical observation) – such as loops. Loops include reinforcing (positive feedback loops), balancing loops (change-dampers – e.g., a thermostat) and causal loops (mixes of the two). The last is only predictive with small closed systems on short time lines with clear inputs. One way to think about tipping points involves the initiation of feedback loops.
- Data lag is the delay in response, which can be minutes to years (e.g. birth defects like genetic disease) and which complicate change analysis.
- Stale Data means that data often has a quick shelf life (while research updates are too expensive and don't get done).

However, when there is no budget, resources or staff for primary research, secondary sources are the next choice – and there are many factors affecting reliability of secondary sources, affecting both quantitative and qualitative data. These include

- The aforementioned expense of primary research;
- The all too common homogenization of multiple sources, even when incompatible;
- The lack of stated confidence intervals and research contexts by the initial researchers;
- The distortion of data by media (as there is always the psychological attraction of surprising or disturbing statistics), in terms of both data selection and repetition (transmission accuracy studies, e.g. the child's game of telephone, where the message is repeated from one player to the next until it becomes unrecognizable);
- The representativeness and validity of survey samples (including randomness and response psychology).

Survey response can differ over class, race, income, nationality, locality, gender – within the same country.

- People discount the future [assign immediacy] at different rates.
- It is often difficult to separate wheat from chaff in our information-rich environment.
- People confuse desirability and familiarity with probability
- Groups of experts tend to be inbred and develop a uniformity of vision – often little benchmarking.
- Some analysts may be intimidated or unresponsive and give answers that please.
- Straight line projection, no matter how complex, does not involve an understanding of the underlying process, but only observation of past behavior. Just historical analysis or comparison, NO WHY!

In light of this range of possible problems with horizon scanning, the best approach (beyond minimizing sources of error) is to avoid treating any scanning and risk assessment system as a source of absolute certainty. Instead, it should be designed and utilized as a tool for better understanding the general nature of change and how governments can prepare for it. One basic idea here is developing an organization mindset for change…. quick response, flexible analysis and innovative questioning of assumptions rather than getting the projections right all the time. This means one should:

- Challenge present assumptions;
- Ask questions no one had thought to ask; and
- Build an iterative process to pull new information into decision-making processes.

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FUTURE*takes* welcomes articles that contribute to a reasoned awareness of the future, advance serious and responsible investigation of the future, and promote the development of futures studies methodologies. In addition, **FUTURE*takes*** publishes book reviews, future studies exercises, discussion threads, letters to the editor or equivalent correspondence, and summaries of chapter programs. All published material will normally follow the guidelines delineated herein for contributed articles.

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Park's Law

continued from page 1

which they felt endangered public health.

Déjà vu. It is often said that history has a way of repeating itself. The massive candlelight vigils against the re-importation of U.S. beef reveal a social earthquake rumbling through Korea. The first candlelight gathering on June 13 marked the six-year anniversary of when two Korean schoolgirls were killed after being run over by a U.S. military vehicle. In 2002, that event triggered a tidal wave of national outrage. It is also when candlelight vigils first made their profound presence felt in Korea.

Activists of all sectors were also out in the streets, waving signs bearing anti-government and anti-American messages. In later demonstrations, people hurled stones at riot police, vandalized newspaper headquarters, attacked hotel guests on the streets, and destroyed police buses. The candlelight vigils eventually forced the government to negotiate additional safeguards with the United States and drew an apology from the President. Mr. Lee overhauled his Blue House staff and the Cabinet resigned en masse. The target of all these actions was a government only a little over 100 days old. President Lee, who had been elected in December 2007 by the largest ever winning margin, saw his approval ratings plummet to below 10 percent.

Candlelight demonstrations, which started on 2 May with several thousand demonstrators, drew around three million people to the streets until 12 July, peaking at more than 1 million people on 10 June. The number of demonstrators decreased to about 50,000 on 5 July and finally to about 200-300 on 12 July. The Lee government, which won the election with almost 50% support of voters in December 2007, started losing public support rapidly, and in a *Joongang Daily Newspaper* poll on 31 May his popularity dropped to 19.7%. By 5 June, a *Moonhwa Daily Newspaper* poll placed his popularity at 16.9%, and on 6 June it had dropped to 7.4% according to the *Naeil Shinmun (Daily)*.

The public support of the previous President Roh Moo-Hyun, who enjoyed overall popularity over 30% from 2003-2005 with broadband penetration of 70-80%, dropped to 11% in November 2006 when the broadband penetration was almost 90%. This was due to his ill management of real estate policies that resulted in sharp land price hikes. When President Lee's popularity plummeted to 7.4% in June 2008, largely as a result of the candlelight demonstrations against his governance, the broadband penetration was 99.2%. Leadership popularity fluctuates but with more broadband penetration, the smarter public will ignore the government policies and the National Assembly's legislations. The political power will become weaker due to active Internet-savvy mobs, and this is a new social revolution. The next Korean presidential elections will take place in 2013, and the Smart Mobs will be more powerful than ever and will weaken political leadership and leaders' popularity. Weaker government will emerge.

At one time, decision making often reflected the judgment of individuals or very small groups, but now decision making benefits from the increasing use of open systems that invite broad and transparent participation of groups of experts and individuals from around the world.

BROADBAND PENETRATION AND SMART MOBS

The demonstrations may have their origins in the dynamics of weak government vs. smart individuals and of representative democracy vs. participatory democracy. Even in the 1980s, Jerome Glenn foresaw that Korea will be the country to test the predictions involving Smart Mob activities and the decline of nation-state power relative to individual power in the 21st century, as discussed in his book *Future Mind.*

The more powerful "Smart Mobs" are defeating the new administration in Korea. Park Youngsook's Law says the more broadband penetration, the less is leadership popularity. As noted by a few journals in Korea, when the broadband penetration went up to 90% during the previous administration, the leadership popularity and trust dropped below 20%. Recent events corroborate this law. However, this time the new government was only 100 days old and had a leadership popularity of less than 10%, while broadband penetration had increased to 99%. In a survey conducted by the *Naeil Shinmun (Tomorrow Daily)* in cooperation with the Hangil Research Institute, the current President's popularity on June 6, 2008 went all the way down to 7.4% (12.1% with the "so so" repliers included).

South Korea's broadband network is the most developed in the world, a rank indicated in May 2008 by the international Information Technology and Innovation Foundation (ITIF). The rank takes the penetration rate of broadband connectivity, the average connection speed, and the prices into account. South Korea's broadband is the most developed, with a score of 15.92. Its home broadband penetration rate is 93 percent, and the average speed rate is 49.5 Mbps. Japan ranks second and Finland third. The United States ranks only 15th, with a home broadband penetration rate of 57 percent and an average speed of 4.9 Mbps. China's overall Internet penetration rate is 16 percent, still below the global average of 19.1 percent.

However, in September 2008, South Korea became the only country that had completed a nationwide information superhighway infrastructure. It

See Park's Law, continued on page 5

Park's Law

continued from page 4

is first in the world in per capita Very High Speed Digital Subscriber Line users and is one of the global frontrunners in the information age. People spent 30.4 minutes per day online in 1998, but that figure almost tripled to 90.7 minutes by 2006. 75% of people have been using the Internet in 2008, and more than 30 million Koreans access the Internet everyday. South Korea is a leading country of the information technology revolution. In Korea, per capita mobile phone and Internet use is the highest in East Asia outside of city states like Singapore and Hong Kong.

It is very interesting to know what will happen in 5 years when the full-scale, high-powered mobile computing social networks are fully deployed in Korea. Park's Law of the more broadband penetration, the less leadership popularity may still apply.

Smart Mobs: The Next Social Revolution is a book by Howard Rheingold that deals with the social, economic and political changes implicated by developing technology. The book covers subjects from text-messaging culture to wireless Internet developments to the impact of the Web on the marketplace, according to the Wikipedia definition. The Smart Mobs consider themselves to be smart and powerful so that they do not respect authorities, and Generation X will not acknowledge decisions taken by the National Assembly nor by the government.

Korean protesters against the import of U.S. beef are Smart Mobs on steroids. The recent emergence of technology-enabled collective action in Korea has been spotted by the blogosphere: Agora Daum Web portal site. *TecnhnoKimchi* reports on the emergence of citizen journalism, and *OhMyNews* writes about how its readers spontaneously provide a 'long tail' of funding in exchange for citizen media. Smart Mobs have overturned the entrenched power of the old and conservative media such as *Chosun Ilbo (Daily Newspaper)*, *Joongang Ilbo*, and *Donga Ilbo*.

NATION-STATES – ECLIPSED?

Democracy in the Turmoil of the Future by Jyrki Katainen, Chair of the Committee for the Future, and Mika Mannermaa, published in 2007, explains the declining role of nation-states. The EU has already restricted the state independent legislation and policies in terms of commercial policy, regional policy, taxation, etc. The sovereignty of nation-states is shrinking, reduced by the growth in power of market forces. Turnouts at elections have been declining. Citizens are less interested in being active members of political parties than they are at the ballot box. Up to 2017, demographic change will maintain the basic structure of the political party map, but after 2017, Generation X will create their own culture of influence, and they will not acknowledge decisions taken by the parliament but rather will create their own reality of influence with a mastery of technology and the dynamics of the economy. Influence outside of representative government will increase in different ways. Civil society organisations, the Internet, e-mail and mobile phones and virtual network power will increase. A democracy of minorities will emerge. The political parties of today have not "always" been around, nor will they always be. They will wither and die over the decades.

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Future Mind, written by Jerome Glenn in the late 1980's, predicts the decline of government power. He said, "Although the nation-states will become more effective, other centers of power will grow faster. This will leave the nation-states less powerful in the 21st century relative to the growth of corporate, media, and individual power. Just as royalty is still a factor in the United Kingdom but lost power relative to the growth in parliamentary democracy, so too, nation-states will remain, but their autonomy will continue to erode. As a result, nation-states may have to accept new institutional arrangements to stay in power. Otherwise, they may become withering artifacts of autonomous power, much like what happened in England. Since corporations can move faster than governments and are not bound by geography, it is only a matter of time until they eclipse government power."

DECISION MAKING IMPLICATIONS

Therefore, in order to persuade the Smart Mobs, the government has to apply a whole new operating system to national affairs. The world is moving toward ubiquitous computing with collective intelligence for just-in-time knowledge to inform decisions. Vast peer-reviewed data banks are being interconnected so that composites of data from many sources can present the best facts available for a given decision. At one time, decision making often reflected the judgment of individuals or very small groups, but now decision making benefits from the increasing use of open systems that invite broad and transparent participation of groups of experts and individuals from around the world. Ubiquitous computing will increase the number of decisions per day, constantly changing schedules and priorities. Open systems, democratization, and interactive media are involving more people in decision making.

Decision making will be increasingly augmented by the integration of ubiquitous sensors, a more intelligent Web, and institutional and personal

See Park's Law, continued on page 6

Park's Law

continued from page 5

intelligence software that helps us receive and respond to feedback for improving decisions. Such future capacities might help identify attractors of responsible decision making and network them for improved decisions. One new example is the Real Time Delphi that provides decision makers with rapid access to an ongoing synthesis of experts' judgments enabling rapid response to feedback.

The Korean government has to create the Real Time Delphi system to collect public opinions. Self-organization of volunteers around the world via Web sites, both progressives and conservatives, is another new strategy to increase transparency and expand participation in decision processes. In Korea all the popular Web sites are now progressive, and therefore, more conservative Web portals may be a solution to hear from the silent majority. It is also possible that more Smart Mobs behavior experts will be trained to cope with the challenges and that police and other government agencies will learn how to persuade the public to reason the government's new policies. To deal with Smart Mobs' activities, the government will need to identify future trends for Smart Mobs.

Youngsook Park *has written an article about the recent Korean smart mob activities and direct democracy. In addition, she published articles about Park's Law in a few Korean journals. She is currently a senior adviser at the Australian Embassy Seoul, Chair of UN Future Forum (Millennium Project Korea Node of WFUNA), and Chair of World Future Society Korea. In addition, she is a founder and president of the Korean Foster Care Association which looks after some 4000 abandoned children.*

POINTS FOR THE CLASSROOM
(send comments to forum@futuretakes.org):

- *Park discusses how a Smart Mob can be influential or even decisive in the domestic politics of democracies. Within the next decade, to what extent will a Smart Mob be able to exert similar influence elsewhere – for example, against a corporation, a media outlet, or a foreign government?*
- *Anyone who has access to the Internet is a potential member of a Smart Mob and of the "fourth estate" (the press). However, considering the proliferation of information (and the propensity of some people to "feast" only on information that is consistent with their viewpoints), to what extent will individual Smart Mob participants be influential?*
- *Sources of identity are many – for example, one's community, nation, ethnicity, tribe or family, socioeconomic group, profession, religion, political affiliation or position, university, or sports team. Today, some people identify with larger groups, others identify with smaller groups, and still others experience a general sense of alienation. For its part, the role of the nation-state is declining, as Park and several other authors have noted. In what ways will the advent of the Smart Mob influence people's senses of identity in your part of the world?*
- *What are the implications of the IT-enabled Smart Mob to a government's capability to plan long-range, give a selected course of action a fair chance to succeed, and manage expectations? Are these implications different in parliamentary democracies (that can be toppled by a vote of no confidence) than in other types of democracies (for example, the U.S. system)?*
- *Park notes that turnout in elections is declining. This is also true elsewhere, including in the U.S. Several reasons have been proposed for this – for example, that fundamental issues important to voters are not addressed, or that voters have other avenues of political participation such as Smart Mobs or (in the US) political action committees (PACs). It has even been suggested that apparent voter apathy is characteristic of a mature democracy. Characterize the political process in your part of the world in 2018, considering (a) the level and means of participation by the general public, (b) the relative power of the branches and levels of government, and (c) the types of political organizations that will be influential at that time.*
- *What are the countertrends to increasing corporate power (at the expense of nation-states), if any?*
- *Park states that "Ubiquitous computing will increase the number of decisions per day, constantly changing schedules and priorities." What are the implications to the workforce of tomorrow in your part of the world and elsewhere? Related question – will decision-making become too data dependent, with a corresponding decline in the role of intuition and judgment, as some have argued? Conversely, will computers take over many "left-brain" (deductive, analytical) functions, leading to a possible resurgence of a "right-brain" (intuitive, subjective) working culture, as others have suggested?*

2008 Editors' Breakfast

From left to right – Ken Harris, Tony Au, Jay Herson, Charlotte Aguilar-Millan, Stephen Aguilar-Millan, Guido David Núñez-Mujica (student), Dave Stein, Mohan Tikku, José Cordeiro, Youngsook Park, Shawn Harmsen (student), Ji-Ho Hwang (guest), Lisa-Joy Zgorski, Tommy Osborne, Art Shostak, Steve Steele

Book Discussion

FUTURE*takes* is pleased to publish synopses of World Future Society chapter programs. The following book review/discussion synopsis is from the Futurist Book Group of the Washington DC chapter.

MILLENNIAL MAKEOVER: MySpace, YouTube and the Future of American Politics

Morley Winograd and Mike Hais
Publisher: Rutgers University Press
(March 30, 2008)
336 pages
ISBN-10: 0813543010
ISBN-13: 978-0813543017

Synopsis of the June 2008 meeting of the Futurist Book Group (WFS Washington DC Chapter), joined by Tom Key, coordinator, Orange County (California) chapter; summarized and reviewed by Ken Harris

FUTURE*takes* readers who believe in cyclical theories of history or who are political junkies will find *Millennial Makeover* compelling reading. Being a history lover as well as a futurist, I found the book fascinating, and I look forward to observing the Millennial Generation (i.e., those born between 1982 and 2003) in this year's US presidential election and beyond.

The authors apply the generational dynamics theory of Anglo-American history propounded by William Strauss and Neil Howe in their books written between 1991 and 2006, specifically to American politics, and draw conclusions based on survey research conducted by Frank N. Magid Associates.

A key conclusion is that American political history consists of cycles of 30-40 years of stability interspersed with much shorter periods of profound change called realignments. These political cycles approximate Strauss and Howe's generational cycles. Each generational cycle consists of an Idealist (today the Baby Boomers), a Reactive (today Generation X), a Civic (today the Millennials), and an Adaptive generation (today those born since 2003). Only in Idealist and Civic realignments can truly significant change take place. Idealist realignments like the time of Republican Party ascendancy that began with the 1968 presidential election are times of increased independent party identification, negative political attitudes, focus on divisive social issues, limited use of (or decline in) the national government, and greater economic inequality. Civic realignments are times of enhanced party identification, straight-ticket voting, rising or stable voter turnout, use of the national government to deal with major societal and economic concerns, and greater economic equality like the period of Democratic Party ascendancy that began in 1932. The authors bolster their case that a civic realignment is on the horizon by showing that Millennial attitudes are much like those of previous civic generations.

Idealist realignments began with the presidential elections of 1828, 1896, and 1968 and civic realignments with those of 1860 and 1932. The best arguments put forth in the book that the next realignment will be civic and increasingly driven by the Millennial generation are:

- The Millennial Generation, the largest in American history, is already more numerous than the Baby Boomers and exerting its influence through high voter turnout, volunteer efforts, and asserting its preferences in the marketplace even though its members are not yet in positions of direct power within organizations.
- The Millennials are uniquely equipped for success in the globalized world because, having had uniquely attentive parents, they are extremely self-confident and optimistic about the future; accustomed to working in teams; globally-oriented and, most importantly, far more able to exploit the capabilities of new electronic media than any other current generation. Realignments coincide not only with generational change but also with emergence of new mass communication media and the ability of a political party to make effective use of the new media.
- Democrats regained control of Congress in the 2006 mid-term election with significant help from Millennial generation volunteers and candidates using campaign messages especially appealing to the Millennial Generation. Generally in realignments the previously weaker party (beginning in 1968, the Democrats) becomes the stronger.
- Democrats were more willing in the 2006 mid-term election to conduct Internet campaigning than Republicans and, in the early 2008 race, Senator Obama was more successful than Senator Clinton because he made better use of Internet campaigning and fund raising.
- Voter turnout was significantly higher in the 2006 mid-term election than in 2002.

The greatest uncertainty in the book is whether the crises (e.g., the 9/11 attacks, Hurricane Katrina, the global credit crisis) of this decade have been sufficient to trigger a civic realignment. Far more serious crises— the Civil War and the Great Depression—caused the two previous civic realignments. The authors say, "We may be fortunate to find, in retrospect, that 9/11 was the only catastrophe the country needed in order to set off the chain reaction of responses that will lead to the next realignment. Or, Millennials, like other civic generations, may have to live through a series of even greater and more devastating shocks before the country is ready to move in a new direction." Given this uncertainty, they might have explored the implications of a

See Makeover, continued on page 8

Makeover

continued from page 7

prolonged period of transition to the coming civic era. Would there be more of the culture wars and political gridlock that have so characterized U.S. politics in the recent past or would politicians of the "sensible center" find ways to achieve the compromises (e.g., the $700 billion bailout legislation passed over strenuous objections of the Democratic left and Republican right) necessary to resolve major socioeconomic problems satisfactorily without a fundamental realignment? Or might a new party lead the civic realignment like the Civil War/Reconstruction era Republicans?

Hais and Winograd have long been active in Michigan Democratic politics. No doubt they are delighted that all signs point to a realignment in which the Democratic Party will be dominant for the next three or four decades. However, they are careful to point out that a much different Republican Party could also be dominant in the coming civic era. Both the Republican and Democratic Parties have led both civic and idealist realignments. However, they don't specify what policies a successful Republican presidential candidate would have to advocate, and that his or her administration would have to execute, to assure dominance. They feel Senator McCain has a chance to distance himself sufficiently from the Bush administration, but the need for him to hold the Republican conservative base, which still strongly supports President Bush, may prevent him from doing so.

A recent *Washington Post* article, "The Amazing Adventures of Supergrad" *(http://www.washingtonpost.com/wp-dyn/content/article/2008/06/03/AR2008060302837.html)* strongly supports the authors' view that the Millennial Generation will be unusually influential in all walks of life. In keeping with the Millennials' technological bent, you can see and hear Winograd and Hais at *http://www.youtube.com/watch?v=wLTnHALVHkE* and *http://www.pbs.org/newshour/search_results.html?q=winograd+and+Hais&x=12&y=7*.

The book is a must read both for U.S. voters and for citizens of other nations seeking a fundamental understanding of the U.S. political system.

POINTS FOR THE CLASSROOM
(send comments to forum@futuretakes.org):

- *According to the book, alternating idealist and civic realignments have occurred at 32-36 year intervals. To what extent have these cycles correlated with other cycles such as business and financial cycles? To political gridlock, close elections, and electorate polarization in two-party democracies? (Also consider the cycles discussed by other authors such as Peter von Stackelberg.)*
- *In the present era of rapid and accelerating change, in what ways will cycles of the future resemble those of the past? In what ways will they differ?*
- *In what ways will two-party democracies change in the next decade? Consider (a) the declining role of nation-states, (b) the impact of IT (see Youngsook Park's articles, this issue and past issues), (c) the trade-offs between holding onto political bases while capturing "swing votes" from independents and "undecideds," (d) shifts in relative power among the branches of government (e.g., in the US, legislative, executive, and judicial), and (e) the ephemeral nature of third parties (at least in the US).*

Future of K-12

continued from page 1

result is a labyrinth of college degrees and testing to prove teacher qualification.

Then came the teachers' unions which required contracts, in-step raises, and higher costs. The unions became powerful and their desires were often written into law by malleable politicians.

Hagberg

With better transportation available it seemed appropriate to consolidate. This required a bus system and a whole new hierarchy of superintendents, principals, business administrators, secretaries, clerks and building maintenance staff. Costs skyrocketed!

The school systems began to increase their territory by initiating new subjects to be taught. Some of this was valid because of the increase in human knowledge.

Along with the school districts, and consolidated schools, came the concept of school sports, choirs, bands, etc. The so called "school spirit" was born. These endeavors were enthusiastically embraced by parents who wanted their children to experience the social advantages of these activities. The number of activities multiplied over time and schools became known for their excellence in sports rather than their educational excellence.

With the advent of the big school came the alienation of the students from one another. Many students got lost in the crowd. In this "politically correct" mix came the repression of teaching morality which brought on a new array of social problems.

Costs went up again and eventually got so out of hand that the citizens revolted and many bond issues were voted down. The ailments of the dinosaur were noted by most everyone. Alternatives such as "home schooling," and on-line public schools such as "Connections Academy"[2] are increasingly draining off more resources.

The asteroid of the internet is now on the horizon and there will be a huge impact that will sound the death knell for the mega-school dinosaur. Small educational centers will be instituted and flourish. Teachers unions and legislators will thwart the inevitable but eventually reason will prevail and the large schools will succumb.

The educational system will consist of students in relatively small groups at many localities with comput-

See Future of K-12, continued on page 9

World Future 2008 – A Conference Highlight

The Great Challenges Today and Tomorrow

presentation by Dr. Jerome C. Glenn Director, Millennium Project, World Federation of United Nations Associations

synopsized by Jay Herson

More than 1000 enthusiastic futurists attended the recent 2008 annual meeting of the World Future Society, "Seeing the Future Through New Eyes," in Washington DC. In a special event session entitled "The Great Challenges Today and Tomorrow," Dr. Jerome C. Glenn, Director of the Millennium Project of the World Federation of United Nations Associations, welcomed attendees with a summary of global challenges:

1. How can sustainable development be achieved for all while addressing global climate change?
2. How can everyone have sufficient clear water without conflict?
3. How can population growth and resources be brought into balance?
4. How can genuine democracy emerge from authoritarian regimes?
5. How can policymaking be made more sensitive to global long-term perspectives?
6. How can global convergence of information and communications technologies work for everyone?
7. How can ethical market economies be encouraged to help reduce the gap between rich and poor?
8. How can the threat of new and reemerging diseases and immune micro-organisms be reduced?
9. How can the capacity to decide be improved as the nature of work and institutions change?
10. How can shared values and new security strategies reduce ethnic conflicts, terrorism and the use of weapons of mass destruction?
11. How can the changing status of women help improve the human condition?
12. How can transnational organized crime networks be stopped from becoming more powerful and sophisticated global enterprises?
13. How can growing energy demand be met safely and efficiently?
14. How can scientific and technological breakthroughs be accelerated to improve the human condition?
15. How can ethical considerations become more routinely incorporated into global decisions?

Further details on these challenges and how they vary by continent can be found in: Glenn, J.C., Gordon, T.J. and Florescu, E. *2008 State of the Future*, The Millennium Project, World Federation of United Nations Associations, Washington, DC. *(www.stateofthefuture.org)*

Jay Herson *is Managing Editor and a frequent contributor to* **FUTURE*takes***.

Future of K-12

continued from page 8

erized curricula. "Facilitators" will be in charge instead of teachers. They will monitor the progress of the students and supervise on-line testing. There will be a central, highly competent, group of teachers in separate regional locations to explain difficult concepts by phone or on-line chatting. Progress of each student will be at the student's pace with set requirements for graduation.

Sports, music, and the arts will survive and flourish, but they will return to community- based sponsorship by geographical areas.

The need for teachers and administration will be less and costs will dramatically come down. The smaller units will be naturally more self-governing and the elaborate physical plants will be obsolete. Transportation will also be a less costly problem.

Students will feel an affinity for the small group setting and make lasting relationships. Parents will feel much more like participating in these local student bodies.

It behooves school boards and administrators to get on board and help to facilitate the transition to the internet based on local educational centers. It is a matter of cooperating or getting left behind!

Charles A. Hagberg *has a bachelor's degree in civil engineering from North Dakota State, Fargo and a master's degree in curriculum and instruction from the University of Wisconsin, Madison. He can be contacted at Hagberg@emily.net*

POINTS FOR THE CLASSROOM
(send comments to forum@futuretakes.org):

- *What will "education" itself be in 2020 in your part of the world? Will it be utilitarian – for example, to prepare students for careers that exist at that time or are anticipated to exist, or to maintain national economic competitiveness? Or will learning be valued as an end unto itself? Either way, will curricula still be organized according to subject areas? If so, which subjects will be taught? If not, describe the curricula of 2020.*
- *As discussed by Hagberg, transportation enabled consolidation will give way to smaller educational centers that are made possible by IT and mandated (at least in part) by costs. In addition to the skyrocket-*

See Future of K-12, continued on page 10

Future of K-12

continued from page 9

ing costs of public education, coupled with budget shortfalls in several jurisdictions, what else will force transformation in the present school systems? Also, do you foresee a similar trend from "fusion" to "fission" in other areas of human activity – for example, healthcare, governance, self-sustainability, and even identity itself? Why or why not?

- *What are possible impacts of localized, IT-based learning – and the educational systems of the future – beyond education itself?*
- *(for non-US readers) Have factors similar to those described by Hagberg driven the development of educational institutions in your part of the world? Now, time travel to the year 2020 and describe education – and learning – in your nation or region.*
- *Hagberg foresees that sports, music, and the arts will survive and flourish but become more community based. Will this be true in your part of the world in 2020? What other long-term impacts will IT have on student interaction and unstructured student social life? Also, what else (in addition to education) will become more community based ten years from now?*
- *In various parts of the world, education has been associated with "upward mobility" (that is, advancement in socioeconomic status). Ten years from now, to what extent will this relationship exist?*

ADDITIONAL RESOURCES

- *Fall 2008* Learning Section Bulletin*, this issue, especially the portion on factory model schools as presented by Irene Brock.*
- *"Downloading Education," by Jay Herson,* FUTURE*takes vol. 5, no. 3 (Late Fall 2006).*
- *Learning and education points posted at www.futuretakes.org/FIGs.htm.*

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[1] *First published in the* Brainerd Dispatch*, Brainerd, Minnesota, USA, January 18, 2008; republished with permission.*

[2] *Connections Academy is a publicly funded on-line school presently operating in 15 states. There are variations of this concept as Charter Schools in several other states.*

The Think Tank

THE TOPIC: Implications of the Information Age.

Information overload, the explosion of knowledge, and the information age itself have already made pervasive changes in the way people live and work. For example:

- Peer-reviewed journals often accept and publish research that they wrongly deem original, well-meaning though they may be. The reason is that even the best referees and editors are not always aware of similar research published years ago.
- Several members of the US Congress utilize the services of paid professional tax preparers, because they do not understand the complexities of the tax laws that they enacted.
- In some parts of the world, many physicians are too busy seeing patients to keep up with the new advances in medicine. Instead, they are sometimes forced to rely on the pharmaceutical manufacturers for this information.
- In addition, one might link information overload and voter time constraints to sound bite politics (pervasive in the US) that often quote political candidates out of context.

Where is all of this leading?

1. Are "Renaissance Men" (and women) relics of the past? That is, will we no longer find people who are masters of several professions or fields of knowledge, because there is too much knowledge to master? Will we see more specialists and fewer generalists, or is there a countertrend?
2. Will the Internet redefine research "thoroughness"? That is, if a well-scoped Web search leads to 3,000 hits, how many of these sites will a researcher or staff member be expected to visit – especially in a society already characterized as "chronologically challenged" (that is, not enough hours in the day)?
3. How will book reading be impacted by the Internet and the knowledge explosion? (Disregard the participants in the Futurist Book Group – we know that they are diehards!)
4. Will the classics exist in the year 2050? If so, what literature and other works of today will be the classics of tomorrow – and by what criteria will they earn that status?
5. How else will the knowledge explosion impact education at various levels?
6. Will sound judgment give way to an over-reliance on information – a possibility that has been suggested even for military commanders?
7. What is the long-term future of libraries and the academic "publish or perish" syndrome?
8. What is the long-term future of peer-reviewed journals? Of newspapers? Of magazines including this one?
9. What is the next information frontier after the Internet and hypertext, which themselves represent an evolution beyond the conventional printed media and linear narrative?
10. What are other potential consequences of information overload and the knowledge explosion?

Share your thoughts! If you would like for your thoughts to be considered for publication as commentary, send them to forum@futuretakes.org.

FUTURES LEARNING
World Future Society

WFS Futures Learning Section *Bulletin*

Fall 2008

by Steve Steele, Peter Bishop, John Smart, and Dave Stein

WFS Education Summit Synopsis

More than 60 educators participated in the recent WFS-sponsored Education Summit which featured the perspectives of college faculty, a school superintendent, and four student participants in online education programs. The pervasive themes throughout the summit were three-fold – the desired objectives of future studies, the need for next steps beyond "one-size-fits-all" educational frameworks, and the ways to implement transformational change. Other topics extended from predictability to online education, community colleges, charter schools, and adjunct faculty, even extending to present-day factory model schools and their possible successors.


T. Kahn


Raman


Chan


A. Kahn


Marmer

Global Online Learning Pioneers

Ted M. Kahn, Ph.D. (Panel Chair & Organizer). Co-Founder and CEO, Design Worlds for Learning; Chief Learning Officer, DesignWorlds for College & Careers, and Distinguished Visiting Scholar, Media X @ Stanford University (*http://www.designworlds.com* and *http://www.designworlds.com/college*/)

Neerja Raman, Distinguished Visiting Scholar, Media X and Senior Research Fellow, Stanford University (*http://neerja.raman-net.com* and *http://mediax.stanford.edu*)

Tiffany Chan, graduate of Stanford Educational Program for Gifted Youth (EPGY) Online High School (Stanford OHS: *http://epgy.stanford.edu/ohs/*) and freshman, University of Rochester

Aaron Kahn, graduate of Stanford OHS and freshman, McGill University, Montreal

Max Marmer, senior, Lick-Wilmerding High School (http://www.lwhs.org),
San Francisco, CA, and Student Intern, Institute for the Future, Palo Alto, CA (*http://www.iftf.org*)

Virtual Stanford OHS student contributors:
Russell Coniff, former student at Stanford OHS and freshman, St. Johns University, Santa Fe, NM

Harper Robertson, Senior, Stanford OHS

Jake Schepps, Senior, Stanford OHS

INSIDE THIS ISSUE:

Leading the day's presentations was a student panel chaired by Dr. Ted Kahn of DesignWorlds for Learning, Inc. & DesignWorlds for College – and a parent of a student panelist and Stanford University's Online High School (OHS) graduate, Aaron Kahn. Stanford OHS (*http://epgy.stanford.edu/ohs/*) was born from Stanford's Educational Program for Gifted Youth (EPGY: *http://epgy.stanford.edu*). Dr. Kahn presented several advantages of online education that he has observed, including the increased retention of knowledge, the improved efficiency (less time needed to absorb information), the more favorable teacher-student ratio, Web and online mechanisms to share the best instructional content and student interactions, and the reduction (or even elimination) of a typical disciplinarian role of the high school teacher – as well as the elimination of the artificial grade/age distinction. In addition, Kahn noted that some online education (e.g., OHS) can be more learner-centered, focusing on the differential needs of students, and can engage more participation from students (especially those who may tend to not be verbal participants in traditional high school classrooms), encouraging them to focus on key 21st century knowledge economy questions (knowledge – what, how, when, where, who, and why), as well as the "what if" (foresight, alternative consequences/scenarios) questions that are so essential in preparing students for the future. An added advantage, he added, is that this kind of online education enables students to spend more time finding mentors to complement their formal education, in addition to enabling great teachers to really engage students in critical inquiry, discussion and elaboration of their knowledge.

Dr. Kahn presented several advantages of online education that he has observed, including the increased retention of knowledge, the improved efficiency (less time needed to absorb information), the more favorable teacher-student ratio, Web and online mechanisms to share the best instructional content and student interactions, and the reduction (or even elimination) of a typical disciplinarian role of the high school teacher – as well as the elimination of the artificial grade/age distinction.

Turning to implementation issues, Kahn indicated that the media can vary as needed – for example, using a shared whiteboard, a microphone and video Webcam, or real-time chat services. He further noted that synchronous connectivity (real-time, even with students in different time zones) is useful for some activities, such as brainstorming and live discussion, while asynchronous connectivity (anytime, different locations) is more useful for other purposes.

Not content to share just his own observations, Kahn invited the panelists, some of whom were themselves Stanford OHS student participants (Aaron Kahn, Tiffany Chan and via a proxy presentation, Russell Coniff), to share their reactions and reflections. Key OHS student observations about the online experience included: the potential to unleash creativity, consider real world application and integration, and support cross-cultural education (for example, via interaction with high school students from different socioeconomic, geographic, and ethnic backgrounds), which in turn, can support improved global understanding and promote world peace and harmony. All student panelists, including Max Marmer, added that online learning also needs to be complemented by real world learning experiences and applications of knowledge (e.g., John Dewey's "knowing and learning by doing") and the development of social and emotional intelligence to identify and use workarounds to overcome formal barriers to success. OHS student graduates Aaron Kahn and Tiffany Chan noted that online education was a welcome departure from the "one-size-fits-all" focus on standardized tests and grade point average (GPA)/class rankings as numerical-only measures of achievement and success, and that some of their most valuable learning experiences (often socially-based) have been outside the online classroom. High school senior Max Marmer, as well as Neerja Raman, longtime technologist and researcher at Hewlett Packard and now a Research Fellow at Stanford University, further noted that an increasing number of employers value virtual collaborative capability and creativity, regarding these as essential as (or even sometimes more important than) the traditional "3Rs" (reading, 'riting, and 'rithmetic).

One student even pointed out through online education, one "learns how to learn" – an increasingly vital lifeskill in the global knowledge economy considering that more than 80% of the jobs that today's students will have in the 21st Century do not yet even exist today. Marmer also emphasized a very different, but complementary, view about the importance of technology in high school education – not just as a medium for delivery of content or students taking courses online, but for students to learn how to design and integrate multiple kinds of technologies into offline as well as online learning. His specific examples included using the Web to research and find innovative people and projects in col-

leges, universities and industry in other places around the world – and to find ways to bring these innovations and new technologies directly into the high school environment. Marmer and Raman both focused on the importance of developing and applying foresight, as well as social entrepreneurship, as other key 21st century lifeskills, and Raman especially highlighted how effective practices in virtual collaboration in industry and research should be made available to students from all backgrounds, especially those from economically disadvantaged environments around the world.

However, the OHS student panelists were also quick to note some of the disadvantages of "clicks" as a substitute for "bricks," not the least of which was the lack of a real social life in being able to meet informally and "hang out" with other students. (In fairness, it was pointed out that in a typical large American public high school, it is difficult for a student to interact with – or even know – more than even one-fourth of his/her classmates.) One student, with avid interest in writing, poetry, and music, went further, noting that a real social life sparks creative outlets and that he had missed during his past year. For Tiffany Chan, a Hong Kong resident and OHS graduate, the challenge was must greater, as the OHS synchronous online class schedules imposed a nocturnal schedule that tended to isolate her from her own Hong Kong peers.

To provide the face-to-face dimension, the panelists proposed that schools provide more structured gatherings, such as educational trips, summer labs, and extracurricular activities. Also proposed was an online environment to maintain learning as a social process, an online school library, and unstructured time away from the subject matter.

Q&A

Q: Is there increased instructor burnout from need to be available and responsive 24x7?

A: Yes. This can be stressing and tend to overwork the teachers. Timely feedback requires a high energy investment. However, teachers have enjoyed dedicating their attention to small numbers of students.

Q: What are the admissions criteria for students coming into the program?

A: The application process for EPGY is more rigorous, as it requires several essays in addition to test scores (Note: one student mentioned the admission application for OHS was as rigorous as many college applications). Even so, the process is not as limiting as one may think, as learning potential is important, not just test scores or previous GPA.

Q: What is the cost of the Stanford OHS online education program?

A: $12,000 for full time students, but this is less that the cost of prep schools in New England. There are also arrangements that combine part-time participation with high school attendance, and thanks to a major grant to OHS, many OHS students are on partial or even full scholarships.

Q: How has your online education program impacted your social life?

A: [Tiffany Chan]: It has put me into a nocturnal pattern, as I lived in Hong Kong while participating in a US online education program. This limited my social interaction with my geographic peers and gave me a feeling of being alone.

A: [Aaron Kahn] I had a text-oriented social life, that is, online chat… There were some get-togethers, but dating was difficult.

Q: Do you think that this (online learning) is the education of the future?

A: We need to continue what is valuable in both the real and the virtual worlds. People in the professional community want to be involved in education but there is no low-commitment way to do this. We offer college prep courses. Still there are challenges in transferring credits

Q: Will you be disappointed going to a traditional college setting?

A: [a student panelist] No.

Q: Will there emerge a combination high school and early college program? What happens when this model is exposed to the world, that is, increased in scope beyond gifted students?

A: Online education is potentially scalable, and the technology has exhibited this behavior. However, the teachers need financial compensation. Also wanted is a system that is more focused on succeeding in life than on test scores. High schools and colleges need to be brought together.

A: Online education provides intrinsic motivation, as opposed to extrinsic.

A: Some people learn best from books, and some people learn differently. High schools should be tailored for different motivations and interests. An additional challenge is knowing who is really gifted – and redefining and finding better ways to identify different forms of "giftedness" and what psychologist/ Tufts University Dean of Arts & Sciences, Dr Robert Sternberg, calls "successful intelligence" (analytic, creative, and practical, as well as wisdom)!

A: Online education is more difficult to implement, but the rewards are greater, too.

C: There are possibilities to work with the Millennium Project's Futures Essay Program, Future Problem Solvers, and the Oracle Education Foundation's Think.com and ThinkQuest programs (*http://www.thinkquest.org/en/*).

Some Suggested Priorities for Futurists in the Classroom

Smart

***John Smart**, President, Accelerating Studies Foundation*

This panel was followed by John Smart, who identified fundamental questions that foresight studies should explore as well as practical implementation considerations. Beginning with the observation that Tamkang University, Taiwan requires a course in future studies as part of its general education curriculum, Smart noted that there are presently ten academic programs in future studies – the others being in the US, Israel, and some of the Scandinavian countries. A key point in Smart's presentation was that future studies should address basic fundamental questions – for example:

- What are the developmental forces and evolutionary choices?
- What is predictable? What is intrinsically unpredictable?
- What long-range forces act on complex systems besides natural selection?
- Does history have directionality?

In addition, Smart proposed that studies of the future encompass three key areas:

- Future studies – evolutionary changes, the possible, scenarios, alternative futures
- Developmental studies – irreversible changes or "phase changes"
- Acceleration studies – accelerated change, exponential growth, positive feedback loops, self-catalyzing processes

Turning his attention to practical matters and recognizing the challenges inherent in establishing futures studies programs, Smart identified several possible allies:

- Businesses, particularly their innovation departments
- Entrepreneurs
- Alumni centers (which provide a mechanism for interested alumni to become involved)
- Libraries
- Computer centers
- Vocational, technological, and industrial arts departments
- Faculty (speeches, by topics)
- Career services centers

Smart noted that at present, very few undergraduates use their career center (or career placement services) more than one month prior to graduation, even for summer internships.

Continuing, Smart identified a cognitive diversity assessment that can help students identify their strengths, and as a student exercise, he proposed that students write their obituaries (or for those who don't like to think in terms of death, their 90-year roasts).

Designing the Future of Education

***Irene Brock,** Partner, FuturEd, LLC*

Irene Brock's presentation identified a key underlying model and hidden assumption for many schools – the factory model. Patterned after the same industrial-era factories for which they produced workers, factory model schools are mass focused, "one-size-fits-all," and controlling behavior is substantially more important than student learning, observed Brock, adding that both factories and schools rely on extrinsic motivators including competition. Grade progression mirrors the assembly line, while rote learning is a reflection of repetitive tasks in factories. Furthermore, most schools continue to compartmentalize in terms of subject areas and grade levels, and departments often do not talk with one another.

"The brain requires social contact for learning," said Brock, echoing the experiences of Ted Kahn's student panelists. Learning is both conscious and unconscious, and it involves both focused attention and peripheral perception, she continued, adding that the brain processes parts and wholes simultaneously.

Brock

Continuing, Brock noted that 90% of all mental tasks in schools are at the knowledge level (regurgitation of facts) and the comprehension level (understanding the concepts but not necessarily being able to apply them), rarely extending to higher levels of thought complexity as described in Bloom's taxonomy. For marginal performers, the system offers only the "either-or" decision – specifically, to advance them to the next grade or retain them in their present one – and both are counterproductive. Although educators are aware of the problems, the system does not let them implement constructive changes, she added.

As a way forward, Brock proposed reversing the time/learning relationship. Presently, time is the independent variable, as evidenced by the school calendar including the six-week grading periods that are common in the US. As an alternative, learning should be the independent variable and time the dependent variable, with each student progressing according to his/her own talents, interests, and internal time clock. Global age education calls for creative thinking and an otherwise full range of thinking skills applied in multiple contexts as the factory assembly line increasingly gives way to customization and to nonlinear integrated development, envisions Brock.

"The brain requires social contact for learning," said Brock, echoing the experiences of Ted Kahn's student panelists. Learning is both conscious and unconscious, and it involves both focused attention and peripheral perception, she continued, adding that the brain processes parts and wholes simultaneously. In the global age, both learning and work need to be challenging, meaningful, and invigorating. "Each brain is uniquely organized," emphasized Brock.

Above all is the need for a student to know himself/herself and how to learn, Brock suggested. "Let them keep their log cabins, but describe your desired society."

Teaching Futures and Futures Education

***Steve Steele**, Professor of Future Studies, Institute for the Future at Anne Arundel Community College (IF@AACC)*
***Peter Bishop**, President, Strategic Foresight and Development and Professor, University of Houston*
***Dennis Peterson**, Superintendent, Minnetonka School District*
***Art Shostak**, Professor Emeritus of Sociology, Drexel University*

Representing a community college perspective, Professor Steve Steele, Institute for the Future at Anne Arundel Community College, pointed out that high schools and community colleges (1,300 in the US) can act locally and are less constrained by tradition than are universities. Neither K-12 nor the publish or perish environment, they are freer to innovate, he observed, adding that students are looking for something different in their educational experiences. Even so, questions such as "Where's my classroom?" and "Where's my textbook?" continue to reflect thinking that is engrained in the academic community. Even community colleges tend to institutionalize, Steele continued, and they need to create alternatives. Steele suggested using uncommon pathways in support of future studies, for example, using art to represent how Annapolis may be in the year 2060.


Steele

Turning to long-range objectives, Steele asked the provocative question, "What do we want students to have when they finish a futures course? For example, should they be equally prepared to deal with the future as with the present and past?"

Addressing the same themes of long-range objectives and ways to achieve them, Professor Peter Bishop began with observations on leadership. Leaders promote transformational change through vision and persistence and by being courageous enough to challenge mainstream thinking.

Observing that social change is underrepresented in sociology books, Bishop suggested increased emphasis on social statics (that is, how a society stays together) and social dynamics (how a society changes). Curricula should also focus on three futures – the expected future ("What is going to happen?"), the alternative futures ("What might happen instead?") and the preferred future ("What do you want to happen?")

Turning to long-range objectives, Steele asked the provocative question, "What do we want students to have when they finish a futures course? For example, should they be equally prepared to deal with the future as with the present and past?"

To implement the vision, Bishop further suggested that future studies be included in every course. For example, mathematics courses can relate future studies to time series, extrapolation, probabilities, preference ranking, and criteria weighting, whereas history courses can focus on flow, changes over time, patterns, contingencies, alternative histories, historical images of the future, and historical analogy. For literature courses, the connection is through fiction including science fiction and through conditions and characteristics. Language studies offer the future tense and the subjunctive mode, and courses in the physical sciences can include material on technology applications and social consequences. To this end, Bishop suggested working through teachers' professional organizations.


Bishop

Concurrent actions proposed by Bishop include a requirement for more futures courses at all levels as well as development of a resource database. He is presently developing the Foresight Education Project that will help educators to include future studies material in existing courses and to develop stand-alone courses. He has developed a Website (*http://foresighteducation.org*) to gather futures material that has already been taught to be used by teachers who are beginning their careers as futures educators. Individuals can contribute material to the Website by sending it to *foresighteducation@uh.edu*. The Project will also support teachers through email, telephone and personal visits. Eventually the Project hopes to change curriculum standards in both secondary and higher education.

During the discussion that followed, the compelling if ephemeral interest in the future among many people was emphasized. For example, voters choose between two or more visions of the future and some students choose careers based on anticipated career paths.


Peterson

At this point, the perspectives came full circle with the presentation by Dennis Peterson, a school superintendent for 39 years. Echoing observations from earlier presentations on the difficulties in achieving transformational change, Peterson noted the tendency of school boards to balance educational needs with political interests, not the least of which is keeping taxes as low as possible. An additional challenge is that for a transformational school administrator, tenure does not exist, and he/she is not likely to remain in office much beyond the initial change.

Compounding the challenge is the fact that technology "re-wires" the way in which students think and respond but many faculty and administrators have little experience with the technology. Furthermore, centralized planning (most recently, "no child left behind") is an approach that failed in the Soviet Union, continued Peterson.

To implement transformational change, it is essential to bring the community with you, he observed, adding that students are driven by the need for social connections.

Q&A

Q: How have you implemented transformational change?
A: I don't do it. I get other people interested in the same changes.
Q: How have you developed support from the public?
A: Our approach has been to start with small steps that lead to positive but observable changes.

In terms of visions and needs, Professor Art Shostak asked how we can accelerate knowledge acquisition in our society, adding that we need to add the craft of imagination and think holistically about education reform. In posing this question, Shostak spoke in terms of a "4P model" of futures – the probable, the possible, the preferable, and the preventable – as a possible variant of Professor Bishop's three futures.

Observing that people are hard-wired to speculate about tomorrow, Shostak suggested that a "one size fits all" is an insult to the diversity that nature created. He added that in the US, 58% of Caucasians are relatively satisfied with their schools in contrast with 42% among other ethnic groups.

Echoing Peterson's comment that school boards are elected to keep taxes down, Shostak pointed out that charter school involvement gives us alternative models that we need to consider. In analogy with states in the US being laboratories for democracy, charter schools are laboratories for education.

As further steps, Shostak proposed several courses of action

- Enrolling in Friends of the Future
- Meeting with local superintendents and principals
- Writing letters to the editor (newspapers)
- Offering subscriptions to *The Futurist*
- Offering to mentor a futures class
- Speaking
- Helping raise money so that more teachers can attend the WFS conference
- Urging the school system to sponsor futures fairs analogous to science fairs and focused on the "4P" futures

He further suggested that roof gardens and energy-friendly schools can be indicative of "walking the talk."

To support transformational change in education, Shostak suggested several resources including *Edutopia* (a must read, he emphasized), *Rethinking Schools* (in his view, awesome), *Vision 2021* (K-12 focused), *Converge*, and *Future Survey*.

Teaching Futures and Futures Education

***David Pearce Snyder**, President, Snyder Family Enterprises*

David Pearce Snyder, a consulting futurist, brought the Education Summit full circle as he discussed the confluence of IT, demographic trends, and energy costs and the implications for the faculty of the future. With many baby boomers retiring, and also considering the baby bust that followed the boomers, there are not enough college professors to meet the demands of increasing college enrollment – itself partly a result of the baby boom echo, argued Snyder. Even beyond the education profession, he continued, the US is experiencing a labor shortage and will need to import workers or export jobs.

With many baby boomers retiring, and also considering the baby bust that followed the boomers, there are not enough college professors to meet the demands of increasing college enrollment – itself partly a result of the baby boom echo, argued Snyder. Even beyond the education profession, he continued, the US is experiencing a labor shortage and will need to import workers or export jobs.

At the same time, energy consuming schools are not sustainable, indicated Snyder, and four-day school weeks are becoming more attractive so that fuel costs can be reduced. Asked Snyder, "What do we do on the fifth day? Can we get students to the local library?"

But an IT infrastructure exists, continued Snyder, and it costs 50% less than the present educational system. Additional benefits are 30% better retention and 40% less time consumption. The Internet is now a near-necessity of life, and there is a need for new learning skills including teamwork and problem solving. Technology will grow faster than traditional education systems can follow, predicts Snyder, and parents may someday tell teachers, "My kid knows more than you're teaching him in sixth grade."

Snyder

With IT as the enabler, adjuncts may comprise most of the faculty in the future and serve as resources on line, envisions Snyder, adding that even with the shortage of K-12 teachers, public acceptance of adjuncts is for the moment an open question. Additional challenges include institutional resistance from full-time faculty and possibly from accrediting agencies, he continued, and presently there is no system to provide healthcare and other benefits.

The pervasive themes throughout the summit were threefold – the desired objectives of future studies, the need for next steps beyond "one-size-fits-all" educational frameworks, and the ways to implement transformational change.

Next Steps

At the conclusion of the Education Summit, participants were asked to identify what they want from the WFS Learning Section.

- Several participants identified the need for a compendium of available resources including course outlines and syllabi, in other words, "What can I use in class tomorrow"? Spearheaded by a few of the participants, compilation is now in progress.
- Also suggested was the possibility of a speakers' bureau.
- As a supplement to the *Learning Section Bulletin*, **FUTURE*takes*** agreed to launch an "Educator of the Quarter" column. Selections will be from among the ranks of leading professors and teachers in future studies as well as educators who are using innovative teaching methods of potential interest to futurists.

It was further suggested that increased international participation in developing course materials will enrich educators and students across the globe substantially.

Art Shostak *Educator of the Quarter*

Professor Emeritus of Sociology, Drexel University

Professor Art Shostak's involvement in education dates back to 1947, when, as a wide-eyed 10-year old boy he watched his no-nonsense mother create a PTA organization, rally its rag-tag membership of working-class women, and lead them in storming the offices of the austere and distant Brooklyn Board of Education. They sought the re-designation of his K-6 public school as a junior high school (grades 7-9), as that would keep their children in the old neighborhood for three more school years, assure their influence over area schooling, and avoid busing to a distant school. To the astonishment of cynics, they won their re-designation fight – and he got his first up-close demonstration of the ability of aroused citizens to alter educational futures.

His first chance to personally employ educational futures came in 1961, when as a freshly-minted Ph.D., he began a 42-year career as a college teacher of sociology courses (including futuristics, which he introduced in 1970 to Philadelphia as a credit course at Drexel University, and, in 1980, to the American Labor Movement at the AFL-CIO George Meany Center for Labor Studies). His campus-based innovations included getting to class before everyone so as to re-arrange chairs in an inviting semicircle, inviting unorthodox guest speakers, requiring field learning exercises, developing brand new courses, and drawing on young co-learners for much class input, far more than they were accustomed to in other courses. He saw these and related practices as consequential aids to learning, theirs and his, especially as they pointed up openings for change, a future-making value he championed then and now.

Off campus in the 1960s, Professor Shostak joined

the local Urban League chapter in an ill-fated future-shaping effort to defeat a school bond issue. His chapter pointed out it would only repair many fire trap old schools just where they stood (in a racially segregated pattern). They urged replacement of all schools by mammoth new Educational Parks, as they believed the consolidation of K-12 resources at such parks would give underprivileged urban youngsters access to a great onsite library, a fine gymnasium, and persuasive mentoring by able older students. While their visionary scenario got many more votes than they had dared hope for, the "same old, same old" policy won the day ... a searing early lesson for Shostak in the vulnerability of Grand Reform Schemes to defeat by far less demanding notions.

In the same decade, Shostak helped some new and fragile charter schools (CS) try to define and operationalize their missions. This taught him how truly difficult were both matters, especially when so much had to be learned from scratch (unlike the current CS revival, for which a history is available as a guideline). Additional challenges were differences among parents about preferred school cultures (permissive versus demanding) and radically different expectations of the near-future for their offspring (dark versus bright). Indeed, he learned that schooling for tomorrow was anything but an easy row to hoe. Recounts Shostak, "As Vice President of the Board of the experimental private school my own sons attended, I learned how vital nitty-gritty matters were in keeping such a school one step ahead of the bill collectors."

Before the decade ended, Shostak had an opportunity to help shape the educational component of new Job Corps Centers. He helped model the program before its launch by housing and schooling 300 male teenagers in University Dorms. They made clear how far behind their schooling had left them, and as an applied futurist Shostak warned visiting Job Corps officials that the evolving labor market required much these youngsters still had to acquire. Experimenting with raising reading literacy and personal aspirations, they were handicapped by unanticipated personal rehabilitation costs (as for overdue dental work, indispensable eye glasses, etc.) ... something no one had mentioned back in the planning stage.

Soon thereafter, Shostak moved to help college teachers of diverse subjects add futuristics to their tool kit. He was an invited speaker at K-12 In-Service Days in school systems around the country. In these talks he previewed major social and cultural trends likely to shape educational realities. Soon he was invited to give similar educational futures talks in Israel, Canada, England and Taiwan.

Eager to secure allies, Shostak increased his effort to get more sociology colleagues to use educational futuristics. In 1966, he edited *Sociology in Action*, a volume of 24 essays by change agents, including "Strategies for Initiating Educational Change in Large Bureaucratic School Systems," by noted sociologists M. D. Fantini and G. Weinstein. Encouraged by responses to it, and to the entire volume, in 1974 he wrote his own 403-page book of pragmatic reform ideas, *Modern Social Reforms*, in which he paid particular attention to Educational Parks and forecast out several years worth of major changes. Later, in 2001 he compiled and edited a pioneering volume for the American Sociological Association (ASA) – *Utopian Thinking in Sociology: Creating the Good Society: Syllabi and Other Instructional Materials*. In 2003 Shostak edited a collection of 47 essays, *Viable Utopian Ideas: Shaping a Better World*, and he made a point of including six essays advancing reform ideas for education. Some of this must have been noticed, since the ASA named Shostak the sole 2006 winner of a lifetime award for Sociological Practice.

Shostak

Most recently in 2008, Shostak capstoned his entire career with a monograph entitled *Anticipate the School You Want: Futurizing K-12 Education*. This book highlights future-shaping strategies that school people can grasp, appreciate, and employ – for only as they buy-in early and enthusiastically are reforms likely to earn lasting employ. In this book, Shostak draws on ideas from educational futurists whom he regards as far abler, including Tom Abeles, Peter Bishop, Joe Coates, Jim Dator, James Morrison, Stephen F, Steele, and David Pearce Snyder. Three proposals help set the book apart: It blueprints how to create and maintain an indispensable school Futures Committee. It urges development of a special career academy, a High School of the Future as Shostak designates it. Finally, it urges a biannual light-hearted Futures Fair, an event much like a Science Fair, but far less stressful and far more encompassing and energizing.

Recounts Shostak, "On reflection I think my 40-plus years of effort as an applied futurist to help educators upgrade schooling fall short of my romantic illusions at the outset, this, I suspect, a common conclusion of retired educators. Prospects for future success by others, however, are better than ever. A combination of powerful relevant trends has made anxious people across the globe newly open to plausible counsel from long-range planners. Overdue experiments in educational change, even of the radical variety, are possible as never before. Taken all in all, I believe my lifelong involvement with school people – adults and young co-learners alike – has been a grand adventure. It has enabled me to ally with inspiring people to make the most of education and futuristics, a combination on which may rest the fate of us all."

FORESIGHT EDUCATION PROJECT

Nurture the Future!

Partner with teachers in secondary, college, and graduate programs around the world.

by Peter Bishop

Our Vision – "To teach as much about the future as we teach about the past."

Why bother?

- Modern society is awash in a sea of change; therefore, there is a need to anticipate a future starkly different from the past and unlike the present.
- People really DO try to influence the future – particularly, that of families, work spaces, community, and governance – with good intentions in mind.
- Unfortunately, most are novices at best since formal education offers little preparation for "divining" the future.
- As such, each new graduating class is set adrift on this sea of change called the future with little more than "a wish on a wing!"

The challenge…

- The future hasn't happened yet, how can one teach it?
- The future is too complicated, how can anyone know it?
- Many educators themselves have no formal training about the future.
- State curriculum standards rarely include "futures-related" content.

Teaching more about the future in all of education is the mission of the *Foresight Education Project!* We are partnering with educators around the world.

– Facilitate access to "Ready-to-GO!" instructional materials

- Augment regular lessons with a tip, tool or strategy involving foresight education
- Develop foresight units and stand-alone courses within the regular school environment
- Promote "foresight" enhancing programs.

– Facilitate access to Foresight Experts (educators and others)

– Serve as a link in the worldwide Foresight Community

- Among teachers who teach/have taught foresight courses
- Among the graduate foresight programs located around the world
- With professional futurists in business, government and not-for-profit organizations

So, here is what you can do:

- If you have taught a foresight module, unit or course, send your material (at least one) to *foresighteducation@uh.edu*. We will post your material and invite you to be a contributor to this site. After that, you can add as much material as you like.
- If you are interested in teaching a foresight course, you may use the material on this site for your classes.
- And anyone can subscribe to the Foresight Education listserve by sending an email to *LISTSERV@LISTSERV.UH.EDU* with the word **subscribe foresighteducation** in the body of the message.

The *Foresight Education Project* proudly introduces "Our Partners"

- **Futures Studies** (*tech.uh.edu/Programs/Futures_Studies*) University of Houston's graduate program; and the student-alumni site (www.houstonfutures.org) for the program
- **Futures Learning Section, World Future Society** (*www.wfs.org/futureslearning*)
- **Online Centre for Pedagogical Research, World Futures Studies Federation** (*teachingcommons.cdl.edu/wfsf/index.html*)
- **FUTURE*takes*** (*www.futuretakes.org*), a free online cross-cultural magazine and educational resource
- **Institute for the Future** (*www.aacc.edu/future*), Anne Arundel Community College
- **Futures Education and Research Network, Acceleration Studies Foundation** (*shapingtomorrowmain.ning.com/group/fsdn*)
- **Foresight International** (*www.foresightinternational.com/au/catalogue*), Brisbane, Australia
- **Texas Future Problem Solving Program** (*www.fpspi.org*)
- **Future Problem Solving International** (*www.fpspi.org*)
- **Global Millennium Prize, Millennium Project** (*www.globalmillenniumprize.org*)
- ***Proteus*, U.S. Office of the Director of National Intelligence and the Center for Strategic Leadership at the U.S. Army War College** (*www.carlisle.army.mil/proteus*),
- **TechCast** (*www.techcast.org*), a virtual think tank on technology developments.