

# ENVIRONMENTAL SCANNING

Office of Institutional Research and Planning

## A LEARNING RESOURCE FOR PLANNING AND BENCHMARKING



**MAY 1995 TO  
JULY 1995**

EDUCATION IS ALL ABOUT MAKING IDEAS MEANINGFUL IN OUR LIVES. SOMEHOW, BECAUSE IDEAS ARE NOT MEASURABLE IN CLASSICAL WAYS, WE HAVE SUBSTITUTED INFORMATION AND SURFACE KNOWLEDGE RATHER THAN MEANING AS THE ESSENCE OF TEACHING. WE HAVE REASONED THAT IF WE KNOW ENOUGH "STUFF," IDEAS AND MEANING WILL FOLLOW. HOWEVER, THAT JUST HASN'T HAPPENED AND ISN'T LIKELY TO.

DEEP MEANINGS BRING PURPOSE TO EXPERIENCE. THEY ARE EXTREMELY POWERFUL IN HINDERING OR DRIVING A PERSON. IN FACT, DEEP MEANINGS ACTUALLY GUIDE THE SELECTION OF MANY OF THE EXPERIENCES WE HAVE, THE WAY THOSE EXPERIENCES ARE PERCEIVED, AND THE VALUE WE PLACE ON THEM. WE MUST PAY ATTENTION TO THE DEEP MEANINGS OF OUR STUDENTS.

GEOFFREY CAINE, RENATE NUMMELA CAINE, AND  
SAM CROWELL -from MINDSHIFTS

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## Trends from Naisbitt's Monthly Newsletter

1. With signs of the recession fading, Americans who tend to stay put during hard times are becoming mobile again. About one in five households will move this year. For every American family that has lived in the same home for 30 years, three have roots only months old. Two major goals drive the worldwide trend from nesting to migrating: the aspiration of businesses to cut costs and consolidate operations, and the desire for individuals for a better standard of living.
2. Companies that blindly cut costs may lose out to competitors with higher costs but superior efficiency. That's the real lesson of productivity. More companies are realizing the advantage of improving productivity by thinking the long-term. They dig deep to find the special mix of ingredients that means real efficiency to them.
3. Prepaid cash cards are arriving soon. They will enable people to forget about keeping a pocketful of coins for vending machines and parking meters; cash cards will take the place of cash in a growing number of small transactions. Cash cards are the precursor to more sophisticated smart cards set to emerge in the next few years. Those cards, equipped with microchips instead of magnetic stripes, will hold a range of personal information about holders, from their medical history to security authorization data.
4. Business camp is now a niche of the summer camp. The business camp teaches teens the rudiments of handling money and starting a business. Example: the National Education Center for Women in Business sponsors Camp Entrepreneur, a two-year old program based at Seton Hall College in Pennsylvania.
5. Service and convenience are the most important elements of marketing to the affluent.
6. Advances in miniaturization are rapidly creating products that offer functions unheard of a few years ago. There are advances being made in the development of an array of appliances known as micromachines. Most use silicon, the material in electronic chips. The U.S. is the leader in micromachine technology, because many existing design allow mass production. Some examples: accelerometers, devices that sense changes in acceleration are used in "smart" heart pacemakers; hard drives the size of a thick credit card for automotive diagnostics; watches that hold phone numbers, alarms, to do lists; for such watches, information is entered in companion PC software, then downloads by holding the watch up to the monitor.
7. Americans used to rate work higher than leisure. That has changed. Recent surveys have found that far more people rate leisure higher than work. Families that enjoy healthy incomes manage to raise their standard of living, but learn that the work that pays for it leaves them less time to enjoy it. Social scientists warn that unless people consciously unplug themselves and pay more attention to their human needs, intensity can burn them out. Exhausted employees are less productive than energetic ones, and more subject to accidents and errors. People must choose to relax.
8. Large businesses are developing an entrepreneurial culture; they are starting to emulate smaller organizations, tuning into the trend from bureaucracy to entrepreneurship. Senior managers who are open to change, prepared to trust workers and capable of customizing unique solutions to problems enjoy a head start in this trend.
9. The future of capitalism in Russia depends on three things: privatization of remaining state-owned industries, the continued infusion of foreign and domestic investment capital, and the adoption of public policies that allow the private sector to flourish.
10. Home computer sales could double by the year 2000. With such encouraging growth, software vendors will scramble to fill an exploding demand for family-oriented titles in education, entertainment, finance, and other categories. There is however a serious problem. Consumers are starting to find that they cannot depend on many of the new products. Winners in the home-software business will be products that combine the best content, easiest interface, and most user-friendly help.
11. Allergies are so pervasive that marketers and others outside the drug industry are increasingly caught up in the relief business. Allergies are not just those related to those like hay fever; thousand suffer from adverse reactions to carpet- and dry-cleaning fluids and common household materials.
12. Free trade within Latin America--and between those nations and North America--is likely to increase substantially over the next several years. In all Latin America, the four most closely watched countries are Argentina, Brazil, Chile and Mexico.
13. All input of information into computer systems, other than simple typing or electronic transfer, depends on scanning. If the paperless office is not yet a reality, it's largely because scanning text and graphics into a desktop computer hasn't been convenient. New products have been developed to improve this situation.

14. Older consumers represent an exploding share of the marketplace. The growth of the elderly market over the next quarter century is one of the few sure things we can count on.
15. A collective voice for workers may be useful, but the old union model is dying. If unions are to survive, they must reinvent themselves for the 21st century. While many companies discard bureaucratic management in favor of cooperative, self-managed teams, many unions haven't changed their basic thinking in 30 years. In enlightened companies, managers understand the benefits of a satisfied participatory work force, while workers appreciate the importance of keeping their employers competitive. The larger hope for unions lies in defining their constituency. While the number of laborers and miners with union membership dropped by 2.3 million between 1984 and 1994, the number of unionized managers, executives, and professional workers increased by 1.6 million.
16. Videoconferencing, unlike videophones, was destined to succeed – simply because the technology pays for itself many times over. Videoconferencing is moving from conference rooms to desktops. Eventually, the technology will become just another icon on a computer screen, making it practical for workers at even the smallest company to talk face-to-face with colleagues and customers around the globe. A major new trend: from being there literally to being there virtually.
17. Social responsibility is influencing financial and community decisions more than ever. The message is being to sink in: Companies feel that giving back to their communities is a part of doing business. Examples: local McDonald's franchisees raise millions of dollars for Ronald McDonald houses; Atlanta-based InnerCity Foods runs 28 Checkers restaurants in three states. Most are located in urban, predominantly black neighborhoods that other fast-food chains often shun. The chairman hires locally and gives a share of the proceeds from restaurants to local education programs.
18. Many schools find that part-time jobs, rather than detracting from studying, can make school relevant by revealing the demands of the workplace. Educators now look to different job-preparation models, such as Germany's, where the academic program of noncollege students includes apprenticeships and job training. Last year Congress passed the School-to-Work Act which allows the Education Department to provide seed monies to set up school-business partnerships that follow students for up to two years after graduation.
19. Post offices may go private. Most however will remain postal monopolies under government control.
20. Employers are paying more attention to depression, the U.S.'s most prevalent mental health problem. Estimated costs of \$44 billion for medical bills, absenteeism, and lost productivity. Unreported depression undermines the workplace, as insurance companies discourage sufferers from seeking treatment.
21. Car-navigation systems could be big sellers in the U.S. New models included both aural and visual directions, and some respond to voice commands, allowing the driver to keep his/her eyes on the road.
22. More people are experimenting with job sharing. Of more than 500 corporations polled last year, 37 percent offered job sharing, compared with 28 % in 1990. Job sharers include co-managers to secretaries.
23. In the U.S. alone, 12 million miles of fiber-optic cable have been laid. Optical fiber has extraordinary capacity - the glass strands carry 25,000 times more information than copper telephone lines. Through personal computers or television sets linked by fiber-optic cables, companies will be able to monitor operations and conduct business anywhere on earth in real time. A dozen state governments plan to improve state services while saving money, through the development of fiber-optic networks that carry voice, video and data. Iowa and Georgia already have theirs. In Plano, Texas, school officials are rapidly installing a network linking teachers, administrators and students to each other and to the district's regional education center. By the end of 1996, the district expects to use the network in a computer-based curriculum that integrates subjects, a procedure called connected learning. Each of 1,200 elementary classrooms will be equipped with up to seven computers, a laser-disc player, a CD-ROM unit, a printer, a VCR and a large screen monitor.
24. Electronic production and distribution make it possible for almost any marketer--including those who aren't really publishers--to develop and distribute specialty publications that promote their products and services. Demand publishing lets businesses issue specific information aimed at narrow, targeted audiences.
25. Consumers define healthy as low fat, but won't surrender taste. The challenge is to make low-fat foods taste good.

#### American Demographics

Undergraduate enrollment will grow slightly in the next ten years, but graduate enrollment will decline. Full-time undergraduate enrollment is expected to increase by over 10 percent; the increase in part-time enrollment will be between two to three percent. Women are the majority of graduate students, and they are closing the gap in professional schools.

America's aging population fills the hearts of business leaders with optimism and fear. Marketers and CEOs are challenged by the opportunities that arise from this huge shift in U.S. consumer markets, and they fear that appealing to older consumers will make their products less attractive to younger consumers. This is especially the situation for network television. There is a problem facing this industry and their advertisers: they consider programs and advertising that appeals to older consumers to be unimportant. Americans aged 45 and older are the largest television audience. Older viewers prefer programming that is ironic, gentle, or factual, rather than farcical, fierce, or sardonic. Truly mature viewers shy away from sitcoms based on put-down humor or crude sexual innuendo.

The gay market is becoming more visible and more diverse. They are moving from the urban scene to the suburbs; there are gender differences; age differences. The estimated percent of the population that is gay is between four to six.

American's anger and suspicion toward government could hurt the quality of federal statistics. Ironically, public trust in the confidentiality of census data was not a problem when the data were not always confidential. It declined only after strict laws were passed to stop the leaks. Today, the public's fear of the census is groundless--and worse than ever. Survey results show that the percent of adults who feel their privacy has been violated: 55 % by computer data bases; 42 % by banks/credit companies, and 29 % by gossiping neighbors.

Future growth in worker productivity will be the greatest in the communications (81 % increase from year 2000 to 2020) and manufacturing industries(64%).

Public attitudes toward smoking are complex, but the facts for businesses are clear. Second-hand smoke is a major health hazard, and the most unhealthy places for second-hand smoke are bars and restaurants.

About 3 million American men play almost 52 rounds of golf a year and spend close to \$2,000.

In an era of corporate change, most American workers are cautiously optimistic about their jobs. Yet baby boomers have more negative attitudes than older or younger workers. A survey indicates the secret to happy workers: two-way communication between employees and managers. Only about one-third of workers say their companies do a good job of listening to their suggestions. In general, job satisfaction increases with age.

Most Americans choose spouses with similar levels of education. This creates vast income differences between married couples. It also helps explain how couples make decisions. Better-educated wives are more likely to share in big-ticket decisions. All spouses have a list of "private" products they buy without discussion. And young working couples are rewriting the rules of matrimony.

Over 40 percent of Americans seek the advice of family and friends when shopping for doctors, lawyers, or auto mechanics. Word of mouth is also crucial to restaurants, entertainment, banking, and personal services.

Rural areas are enjoying widespread population gains in the 1990s. This surprising reversal is based on several new trends. Lower fertility combined with heavy migration from cities is creating thriving rural counties with few children. Farm jobs remain scarce; today, rural growth depends on commuters, retirees, vacationers, and manufacturers.

## Kappan

### An Overview of the Standards Movement - Anne Lewis

Whether lauded as a sign of progress or scorned, the notion of national standards for what students learn in public schools is the hottest item in educational reports today. In some sense, national standards already exist. Researchers on curriculum and instruction have long pointed out that there is a sameness to what is being taught in American public schools, beginning with basal readers and reinforced throughout the years of schooling by other textbooks and standardized tests that guide teachers' priorities.

There are several categories of standards: content standards ( what should be learned in subject areas ); performance standards (levels of learning considered satisfactory ); opportunity-to-learn standards ( conditions and resources available to give students an equal chance to meet performance standards ); and world class standards ( based on the content presented to and the expectations held for students in other countries ).

The ultimate goal of one effort to develop standards (the New Standards) is to create a certificate of mastery that will verify that students have mastered challenging content and know how to apply that knowledge.

Polls of the public show that parents are generally satisfied with the education their children are receiving. Certainly, there is no ground swell of demand for radical change. Educators must make the case that current expectations of students are too low and that the economy and a functioning democracy "demand graduates who can reason, solve problems, and communicate."

### Prologue: Why We Should Care About Caring - Joan Litz

Without caring, individual human beings cannot thrive, communities become violent battlegrounds, the American democratic experiment must ultimately fail, and the planet will not be able to support life. A caring culture in schools requires not radical restructuring of policies, curricula, and systems, but subtle changes in attitudes and scope. Educators must begin to consider their students within the context of the students' ongoing development and within the social context of their families and communities. The research of Goodman, Sutton, and Harkavy showed that caring and respect promoted learning and overpowered the comparative effects of instructional methodologies, whether directive, nondirective, or centered on cooperative problem solving. Caring did not substitute for learning; caring established an effective culture for learning.

### Caring for Others and Being Cared For - Kris Bosworth

The author served on a research team that surveyed students regarding caring in the classroom. The research findings indicated that most interactions between students or between students and their teachers were neutral. The caring things that students said teachers did include "good teaching", helping with schoolwork, explaining work, and checking for understanding; and it also included valuing individuality, showing respect, being tolerant, encouraging, and planning fun activities.

## Assessment Update

### Assessment of Quality in Western Europe - Don Westerheijden and Frans van Vught

In many West European countries, quality has become, since the early 1980s, one of the central foci in debates on higher education and higher education policy making. Some of the reasons for this emphasis include: rapid growth in student enrollment, along with increases in the number of fields of study, departments and new institutions; societal concern about the growth of public expenditures in general; an increased openness in government decision making has led to pressure for accountability; governments have embraced the strategy of self-regulation for higher education; and the internationalization of the European labor market and the European community's programs to stimulate international mobility of students and staff.

### Community College Strategies: Assessment of Noncredit Continuing Education and Community Service Programs - Jeffrey Seybert

Assessment of noncredit continuing education and community service programs have been a neglected component of most community colleges' efforts to evaluate and demonstrate their effectiveness. Given the increasing important role these operations have in overall college missions, it is important that we begin to assess the effectiveness of these operations.

### Total Quality Management, Assessment and Large Class Size - Judy Griffith, John McLure and Jann Weitzel

Assessment can be a special problem for instructors of classes of more than 60 students. Total Quality Management (TQM) provides a philosophical and practical approach that can be helpful in this connection. The application of TQM strategies to both processes and products of large classes may result in assessment that drives out fear, supports continuous improvement, and removes barriers to pride and joy in one's work.

The anonymity of a large class serves as camouflage for some students and a source of anxiety for others. In the University of Iowa's teacher education sequence, we try to limit both problems by using a seating chart, color-coded to show majors and something of interest about the students, as well as names. This chart helps us find expert opinions quickly, such as an English major who can tell us what reader response is. We have used the one-minute essays and both knowledge and interest checklists to gather student feedback for instructional improvement. Two additional techniques for assessing process and product are knowledge checklists and interest checklists. We use the knowledge checklist during the first days of a new semester or unit. Students rank their knowledge level about key concepts on a three-step scale. The information received from the knowledge checklist enables us to pinpoint the information gaps and the level at which we can begin discussion. It also helps us again to assign meaningful readings. At midterm, students look through the topics still to be covered and rank those topics according to their interests and needs. The highest-rated topics become the main foci of the second half of the course. Since we began using TQM strategies, our large classes

have had better attendance, higher participation, and increased quality of student work. We have also done better jobs of planning and delivering instruction.

### Bulletin -- of the American Association of Higher Education

#### Understanding Benchmarking - Ted Marchese

Most firms in competitive industries implemented some version of TQM or CQI in the 1980s. In the 1990s, as CQI matured and competitive pressures grew, a second generation of quality management techniques emerged, among them benchmarking, reengineering, servant leadership, 360-degree evaluation, hoshin planning, and learning organizations. Among these (and given reengineering's decline) benchmarking has so far won the most acceptance. In 1992, a widely noticed study by Ernst & Young of 580 international firms identified benchmarking as one of the highest-payback activities in the quality arsenal. Today, 80 percent of the Fortune 100 companies practice it.

Higher education's engagement with quality management is in its fourth year, with campus efforts now numbering in the hundreds; at least a dozen of the more advanced among these have made first forays into benchmarking, including Oregon State, Babson, Central Florida, Miami (FL), Samford, Belmont, Northwest Missouri, and Penn State.

Key components of benchmarking: 1) deep knowledge of yourself and your processes; 2) determine other organizations that are significantly better than yourself at the process to be improved (these can be determined by literature descriptions, databases, knowledgeable informants, etc.) 3) send a short questionnaire to a dozen or two of the most likely benchmarking partners, 4) visit sites based on total analysis, asking well thought out questions, and 5) compile findings, compare them to your existing process, and make recommendations.

**What is the payoff? Customer satisfaction, market share, and cost reduction.**

Key questions: why shouldn't a registrar's office, library, or remedial studies program be expected to know who in North America is best at its core function and to show learning from them? Why shouldn't a math department be expected to lay its own efforts at teaching calculus, say, against the remarkable courses in that subject mounted by Uri Treisman?

For instructional leaders, whatever the arrangement, if willing departments had a chance to flowchart their major, visit a counterpart or two, and agree on a performance measure to improve, it's hard to imagine that significant gains in conversation and sense of self -- and ultimately for students -- wouldn't follow.

Benchmarking, like CQI, is about learning. The essence of benchmarking lies less in technique than in its larger call to know yourselves, look outward, and aim high.

## **CQI Successes: Fourteen Examples**

### **Four Selected**

#### **University of Minnesota:**

**Process:** Department of Food Science & Nutrition's approach to undergraduate advising

**Action:** an "advising corps" of dedicated faculty who now keep up on technical aspects of advising; advising added to criterion for tenure and promotion.

#### **University of Wisconsin-Madison**

**Process:** Eight departments in the College of Engineering develop own curriculum separate from others.

**Action:** Transformation of math for engineers, technology used to teach math, a freshman design course developed and implemented, and veteran profs are improving teaching methods together, and a college-wide curriculum framework is in place and departments are transforming their curricula accordingly.

#### **Pennsylvania State University:**

**Process:** invoicing and payment process for purchased library materials

**Action:** joint effort of data processing, accounting and library staffs reengineered the process with staff time savings estimated at \$75,000 annually.

#### **Belmont University:**

**Process:** the disbursement and processing of all student loans

**Action:** a joint effort with banking personnel resulted in the university being the first in the nation to receive student loan funds and data via the bank and the Corporate Trade Exchange format that reconciles the funds and data, and eliminates the need for reconciliation processes at the university. Already 70 % of its student loan volume is automated; by late 1995, it is expected to be 100 %.

### **Reassessing Assessment - Tom Angelo**

While assessment is now accepted in the U.S. higher education community, though sometimes begrudgingly, with notable exceptions, campus efforts to know more about and improve student learning still don't enjoy the full support and involvement of academic administrators or faculty. Quoting Peter Ewell, the author indicates the need to manage contradictions between assessment's accountability and improvement purposes, that the dichotomy between the two is not longer tenable.

Angelo suggests the following definition of assessment: a means for focusing our collective attention, examining our assumptions, and creating a shared academic culture dedicated to continuously improving the quality of higher learning. Assessment requires making expectations and standards for quality explicit and public; systematically gathering evidence on how well performance matches those expectations and standards; analyzing and interpreting the evidence; and using the resulting information to document, explain, and improve performance.

### **Embracing Undergraduate Research - John Strassburger**

Undergraduate research is a national trend, and there are now institutions at which it has become a vital force in shaping a whole academic culture. At the author's college (Ursinus in Pennsylvania), the overwhelming majority of all psychology majors participate in undergraduate research, many of them ending up as coauthors of professional papers. The economics department has itself organized its own undergraduate research conference for the past five years.

Having undergraduates engage in sustained work on tough, open-ended problems in which they learn to define and communicate their own solutions -- that's what undergraduate research requires -- may be the best way to prepare people to face tomorrow's challenges. For more and more students, undergraduate research has transformed their experience of education. Students learn, often to their surprise, that they can do work far beyond what they dreamed themselves capable of; they repeatedly describe a new relationship to knowledge, recognizing that ideas are not inert but can be molded.

### **Educational Leadership**

#### **Children Need Communities - John Abbott**

Communities have done young people--and themselves--a grave disservice by separating the world of learning from the world of work and its immediate concerns. Few young people now anticipate a lifetime of working, as many of their parents did, as small cogs in large machines; increasing numbers expect, and welcome, the chance to work as relatively large cogs in smaller organizations that are themselves constantly changing. The skills needed for this are very different.

The need now is for people who can combine their natural, instinctive strategies for learning on the job and in collaboration with other people with a host of technical resources. Society needs many people who can offer both high-level technical skills and basic collaborative, social, problem-solving skills that have largely been discounted by the institutional educational system that grew up to support a manufacturing economy.

Learning is essentially a social activity--it relies upon knowledge construction more than knowledge transfer. Quoting Shoshana Zuboff in the *Age of the Smart Machine*, "Learning is not something which requires time out from productive activity; learning is the very heart of productive activity."

#### **The Community as Classroom - Scott Thompson**

Through a nationwide service learning project, schools at six sites are developing sustained school-community partnerships that enrich student lives. An example: an animal welfare educator was asked to design a student service learning project for a half dozen at-risk students, who were concerned about the welfare of animals. The project gave students workplace experience--everything from spending a day on the job with a professional to a one- to two year plan to develop a range of job-specific skills.

Often these learning experiences can take place on campus with help from a community member. Very often, the projects take place in the workplace, which becomes a laboratory for academic learning as well as job readiness.

A clear contrast can easily be drawn between the community as a classroom (Wisconsin) and the classroom as a community (Hawaii) approach. The Wisconsin model recontextualizes learning—connecting student learning to the real world, and allowing this environment to shape the what and how of teaching. The Hawaii model, on the other hand, is more concerned with nurturance than with context; it brings the kind of supportive networks that are present in ideal communities to bear on children in the classroom who are most in need of such support.

#### **The Certificate of Initial Mastery - Robert Rothman**

A growing number of states require students to earn Certificates of Initial Mastery—documents showing they have what it takes to graduate and succeed in the real world. The basic idea behind the certificate is simplicity itself: Set a high standard and offer a certificate to those who meet it, when they are able to meet it. A fundamental principle of the certificate system is that there will be a fixed standard for all students. A few students won't be expected to master complex, challenging tasks, while others are expected to manage only routine, low-level skills. The national Certificate of Initial Mastery will also do away with the false distinction between academic and applied learning: it is unique in combining academic and vocational standards. Students must demonstrate not only mastery of core academic subjects, but also the ability to apply what they know to tasks common to the workplace and life outside of school.

#### **Innovation Abstracts**

##### **Research in the Electronic Library - Andrea Kempf, Johnson County Community College, KS**

There is a need to assist students in doing research to determine various equivalent terms that define or name the topic being researched. Computerized on-line public access catalog for books and the general periodical index (GPI) required rigidly controlled language to get a specific topic being researched. GPI has virtually no cross references. Locally produced public access catalogs however can be developed so that they are more user friendly. Keyword searches is rapidly becoming the norm in getting to a topic. Taking the time to understand the nature of database searching and to master the necessary search skills will ease everyone's transition from paper to electronic sources.

##### **The Competencies Class: An Old Idea Reconstituted - Robert Merkel, Monroe Community College, MI**

The competencies class is a method of teaching that requires students to demonstrate acquired abilities and learned skills. The instructor uses this technique in music classes designed for elementary education majors. Seventy percent of the students

come to the class with no previous knowledge of music. In one semester, they are expected to sing and to read music. There are eight competencies to be developed. On the day a competency is tested, each student puts his/her name on an evaluation sheet. I collect and shuffle the sheets, then call on the students in shuffled order. Students receive their evaluation sheets and their grades immediately after performing.

#### **Leadership Abstracts**

##### **Will Higher Education Opportunity Survive? - Patrick Callan**

Over the next ten or fifteen years, social and demographic pressures will undoubtedly force the nation, states, and colleges and universities to revisit the issue of higher education opportunity, and ask again whether that broad extension of participation is a good thing. The issue will be precipitated by another tidal wave of students that will begin to hit American higher education in the last part of the century. Between now and about 2009, the nation's high school graduating classes will increase by more than 34 percent.

States must not only learn to reinvest additional dollars in higher education; they are going to have to make choices that put resources behind those institutions that are willing to lead the effort to change the ways in which instruction is organized and delivered.

##### **Mission Possible: Teaching the Disenfranchised - J. William Wenrich**

Education has at its fingertips advantages provided by the most advanced technology the world has ever known, and support from the most democratic, due-process oriented society ever seen. American institutions of higher education have the greatest number and the greatest percentage of the citizenry attending college of any society in history. On the other hand, there is decreasing public and legislative support for higher education, and a lower and decreasing quality of achievement by students coming into our institutions.

The critical question is, in a contentious environment in which community colleges are being confronted from all sides, can they address the issue of bringing the bottom half of our society into the mainstream? The answer is that community colleges can. Only community colleges can; therefore, they must.

The author quotes Pat Cross; "Historically, in most of the periods emphasizing excellence, education has reverted to selecting winners rather than creating them." The community college role is to make winners out of apparently ordinary people and out of those who may have already been cast off.

## **The Teaching Professor**

Grading practices are becoming more conservative. Schools are also moving to more detailed grading systems; in 1992, 59% of the institutions responding to a survey indicated letter-only systems; today, 47%. The percent with pass-fail options also dropped from 59% to 52%.

### **Introductory Courses: 10 No-No's**

No small groups; no dominating students; no disrespect; no open questions; no serendipity; no long papers; no trick questions; no test questions not covered in lecture; no blind essay exams; no delays in grading.

### **What is Essential Content?**

From Charles Walker: foundation content ( needed to understand what follows ); exemplary content ( it models good work and gives the student a reference point ); revised content ( new content to which students should respond assessing the new material and its presentation as input for the instructor for possible revisions); and evaluated content.

## **Higher Education & National Affairs**

Women and persons of color earn increasing an share of academic degrees. Women earned a majority of all degrees award in 1992-93 (55%) up from 54 % the prior year. Persons of color received 15% of all degrees in 1992-93, up from 14%.

Education Update: publication of the Association for Supervision and Curriculum Development

### **Abolish Grades**

In ASCD's annual conference, Alfie Kohn called for the abolition of grades noting that decades of research show that grades are neither valid nor reliable measures . He criticized two goals of assessment: sorting of students to serve the competitive economy and society, and motivation, which fails because one person cannot motivate another. He called for assessments that inform students rather than punishing or rewarding them. Also bring students into the determination of the assessment process.

### **Make: Integrated Curriculum a Reality**

The Canadian Province of Ontario is a proving ground for the implementation of integrated curriculum. In 1993, Ontario issued a controversial new common curriculum with ten cross-curricular outcomes and 4 major areas of study: language, self and society, the arts, and math/science/technology. Three basic assumptions are changing: the purpose of education is no longer seen as maintaining the status quo but insuring success for all students; content is no longer the only thing considered worth knowing; higher-order thinking skills and interpersonal life skills are now valued; the accepted principles of teaching and learning are shifting from the traditional transmission model to an integrated, constructivist approach.

## **Reforming Schools in a Climate of Skepticism**

Education reformers and the public have very different priorities for the schools. For the public, the top three priorities are: to ensure safety, to maintain order, and give the students a solid grounding in "the basics." The public's skepticism is based on past experience with educational innovation, that educators are not producing good results today; and the public has little or now idea how innovations would work.

### **Catalyst: Voices of Chicago School Reform**

### **More Math, Science Means Something's Gotta Give**

To workers in the field, the Board of Education's decision to add two years of science and a year of math to high school graduation requirements is like a magician saying he'll pull an elephant out of his hat. Board officials are fully aware of the problems, but their attitude is: You've got to start somewhere. The need for the change is based on the importance of math and science in getting jobs in a world driven by technology, the courses give students the option to go a variety of colleges, the courses strengthen basic skills and minimize remediation services, and employers are looking for workers with the skills developed in the science and math courses.

### **Books Dealing with Trends and Change**

#### **Rethinking America: A New Game Plan from the American Innovators: Schools, Business, People, Work - Hedrick Smith**

This book is about the need for Americans to develop new ways of thinking -- about ourselves as a people; about how we educate our children and run our businesses; and about how we can work together more effectively, to make America work better for more Americans.

When people get into trouble, they often first look at symptoms rather than at causes--at actions or inaction, rather than at a failure of thought. History teaches us that countries and whole civilizations collapse when their core ideas fail or become obsolete. America's most farsighted innovators have been wise enough to see that they not only face new competitors, but a new kind of economic competition--and that only a fundamental change in thinking, not piecemeal changes in behavior, can meet this new and continuing change.

The changes undertaken in recent years by America's most agile and innovative companies have helped power America's economic recovery in the mid-1990s. In 1993, for the first time since 1985, America was ranked by the World Economic Forum in Switzerland as the world's most competitive economy. Even so, the Forum warned of future U.S. decline unless America makes progress in such vital areas as education and worker training.

Work today is not just doing it; it is, more than ever, thinking. Today's corporation needs thinking, flexible, proactive workers. It wants creative problem solvers, workers smart and skilled enough to move with new technologies and with the ever-changing competitive environment. It needs workers

accustomed to collaborating with co-workers, to participating in quality circles, to dealing with people high and low. Communication skills and people skills have become parts of the necessary repertoire of the modern worker.

Preparing young people for the modern work world imposes new demands on education. It requires rethinking old courses, old curriculums, old standards. It is especially important to ensure a high quality education for average students--the students who will be the backbone of our future workforce.

If constant learning, constant technology change, and constant improvement are the engines of long-term success, they demand that people work together in new ways--to exchange ideas, to develop new processes, to absorb new technology, to invent new products, and to achieve high performance.

The challenge before American industry is whether it is prepared to rethink its role in education. Will it continue to spend or lose \$60 billion by waiting for the problem of inadequate schooling to land on its doorstep--in its factories and in its offices? Or will it do as German industries do--reach out to form a partnership with educators?

Resistance to change and uncertainty about how to change are the heart of America's problem in the 1990s. The real problem in the nineties with education is replication. In the eighties, we did not know really what to do. Now we have examples all over the country of people fixing the schools. And the question is whether or not we can replicate what's being done in the good schools.

#### **A Celebration of Neurons: An Educator's Guide to the Human Brain - Robert Sylwester**

At the cellular level, our brain's three-pint, three-pound mass is divided somewhat evenly between tens of billions of nerve cells, or neurons, that regulate cognitive activity, and the much smaller and more numerous glial cells that support, insulate, and nourish the neurons.

The education profession is now approaching a crossroads. We can continue to focus our energies on the careful observation of external behavior, or we can join the search for a scientific understanding of the brain mechanisms, processes, and malfunctions that affect the successful completion of complex learning tasks.

Only a relatively small number of our brain's tens of billions of neurons are directly involved in sensorimotor interactions with the environment, or with the regulation of basic body processes. Most of our brain's neural networks process the complex interactions that lead to the analysis and solutions of problems.

Our brain uses four basic problem solving procedures: 1) we solve most problems within our own body/brain; 2) our social orientation encourages us to temporarily borrow the brains of others when we can solve the problem ourselves; 3) our brain

has developed various forms of technology to solve biologically impossible problems (e.g. the telephone); and 4) our brain has also discovered how to use herbal and synthetic drug molecules to temporarily alter its chemical composition and thus its normal behavior ( e.g. staying awake ).

Our society has created schools to ensure that students master culturally important information and then have opportunities to test their memories in simulated and real-life settings. Teachers tend to focus most of their time and energy on teaching new information ( i.e. creating memory networks ) and less on using that knowledge in such societal problem situation as discussions, games, simulations, role playing, storytelling, music and art ( i. e. circuit testing). The way subject matter is presented to students is seen by students as a somewhat surreal, random and dreamlike experience. It is the student's task to make sense out of all this nonsense, to translate the seeming curricular randomness into a coherent view of our culture. Unfortunately, our culture seems to value random facts, and schools tend to reinforce this bias.

Our task as educators, however, is to help students begin to find relationships between the somewhat random, often trivial fact-filled experiences of everyday life and the fewer enduring principles that define life--and then help them create and constantly test the memory networks that solidify those relationships. Memory theory and research suggest that the best school vehicle for this search for relationships is storytelling as a broad concept that includes such elements as conversations, debates, role playing, simulations, songs, games, films, and novels.

The following four laws in brain theory should be useful in developing a strong learning environment. First, everything is connected to everything else. All curricula should help students discover who they are, where they live, and how things are connected. Second, everything must go somewhere. What we experience such as help, encouragement, and praise enhances the learning of students, if not today, then later on in life because the effects of those experiences will remain with us in some way. Third, nature knows best. To develop and support effective learning processes that have evolved over eons, we must discover and follow the principles that define our brain's capabilities and limitations. Fourth, there is no such thing as a free lunch. Educational procedures should seek to enhance our brain's strengths and to minimize the negative effects of its weaknesses.

Current brain theory and research now provide only the broad, tantalizing outlines of what the school of the future might be--but we can anticipate that the rate of new discoveries will escalate.

#### **Redesigning Education: A Guide for Developing Human Greatness - Lynn Stoddard**

The author outlines a system of education developed over twenty years in two elementary schools. The author argues that curriculum must take its place as serving the instructors and students rather than serving as king.

Education for human greatness consists of eight frames into which individuals can paint their own mental images of a new system of education.

**Frame One: The Mission of Education** - the mission statement: to develop great human beings who are valuable contributors to society. It is not difficult to help each individual develop an identity of greatness, a mental picture of oneself helping the world become a better place, and realize that this is what it means to be educated.

**Frame Two: The Three Dimensions of Human Greatness:** Identity ( individual talent and gifts, confidence, honesty, character, physical fitness); Interaction ( compassion, love, respect, empathy, communication, responsible citizenship); and Inquiry ( passion for learning, the ability to acquire, process, and use information to gain knowledge, create understanding and solve problems).

**Frame Three: E.(equally)T.(together) Partnerships:** parents and teachers working equally together to help students grow in the three dimensions of human greatness.

**Frame Four: A Take-Charge Philosophy:** a return of control to students, parents, and teachers. They use the curriculum as a means rather than an end. And the end is student development.

**Frame Five: Evaluation of Greatness:** assessment procedures are matched with what we are trying to accomplish; evaluation is used to assess student growth in greatness and for feedback and guidance.

**Frame Six: Multiple Intelligences:** we form a mental image of each student as a unique individual; each person in the world is born with a unique set of intelligences to be developed not a single IQ. The multiple intelligences as proposed by Howard Gardner and Joseph Walters vary in degree with each person: musical, bodily-kinesthetic, logical-mathematical, linguistic, spatial, interpersonal, and intrapersonal. A focus on people, not curricula, allows us to incorporate these valuable findings.

**Frame Seven: How the Brain Works:** humans learn through personal, self-initiated inquiry--the way they learned to talk and walk. The brain thinks automatically; it files information according to the purpose for which it is to be used; information derived from self-initiated inquiry goes to the brain "smelter" where it interacts with all previous and future input and refined into nuggets of personal meaning that are imbedded therein.

**Frame Eight: Strategies for Greatness:** We need to invent and collect strategies that help students grow in the three dimensions of human greatness.

**Mastering the Challenge of Change: Strategies for Each Stage in Your Organization's Life Cycle** - Leroy Thompson, Jr.

Nobody really likes change. Variety is fine, but real, honest-to-goodness change is something else. People in management talk a lot about change. They preach about how this new program or that new concept will make things different, but in truth they have no heartfelt desire to make anything different.

To deal with change effectively, we need to look at the longer-term issues that may dictate where we should be headed and what approaches we should take to get there. In an environment characterized by change, the role of managers is first to create a compelling sense of direction, which employees embrace, and then evaluate continuously the way we do things to stay in step with the needs of those we are doing the work for. The problem is that performance measures give us little insight into success. Rather, they lead us to and settle for near-term benefits, often at the expense of the longer-run vitality of the organization.

The stages of organizational change are: the emerging stage (challenge to establish clear direction); the expanding stage (challenge to make continuous improvements in methods, procedures); the maturity stage (challenge of avoiding the loss of contact with customers or constituents); the entrenched stage (the most challenging of all: the organization is a viable entity, but has lost the energy that produced innovations in meeting customer and constituent needs; barriers make routine collaboration cumbersome, if not impossible; challenge is to make empowerment a practical element of the organization's culture); the complex stage (challenge is that the organization is not operating as a viable entity; decay is acute).

For each of the stages, there should be organizational priorities and key management issues regarding change. Emerging stage - need for direction to address the issue of a clear focus of the future nature of the organization and its direction. Expanding stage - need for execution to address the need for effective processes and systems. Maturity stage - need for sensitivity directed at the ability to attract and hold customers. Entrenched stage - need for leadership to bring about the creation of opportunities for creativity. Complex stage - need for re-creation to challenge historic assumptions.

Organizational culture works on different levels. One level, it operates in the form of visible dimensions of behavior and conduct (elements that people new to the organization must learn in order to become accepted members). These include dress, policies and procedures, and any number of rites, rituals, or commonly accepted practices that are not only unique to the workplace, but function as almost unspoken rules governing behavior. There is also an invisible dimension of culture that guide the employees' understanding of what the purpose of the organization is intended to be. These are belief systems often imposed by top management as a means of forging consensus, e.g. team work and being a team player. Culture also encompasses the organization's views on change - usually a shared sense that few things will change. This poses problems when change is needed; convincing the culture that change is beneficial can be an enormously difficult task. It is important to be able to analyze the type of culture you are dealing with in order to understand the stage of change you are in. The two go hand in hand.

The sources of cultural strength that can be used to support useful change are adaptability, leadership, and individuals who often in restricted management settings establish their own subculture.

The leader will find it key to look for ways to bring out the positive attributes of the current culture and strengthen its ability to produce results. The point is not to create some new culture but to recognize the inherent resilience of an established culture and to find ways to use that resilience to the organization's advantage. There is need for whatever stage the organization may be in for a results orientation.

It is impossible to define a single approach to managing change that captures all of the key requirements. It is all one big balancing act. The learning curve in dealing with change has been greatly accelerated, and we indeed see some hopeful signs. The cry of the workforce has gone up to the ears of management, and for once it seems they are actually hearing what is being said. There are new models for how people should be managed. If we were to aggregate all of the models, you would see three major themes through out: 1) how to handle power, with decided emphasis on sharing with those who usually don't get to; 2) how to exhibit servanthood, which speaks of redefinition of the job of a leader and the modus operandi that is employed; and 3) how to restore connectedness in the work environment, which posits that this sense of belonging is either missing or is needed in greater quantities.

Edwin Louis Cole says that "balance is the key to life." It may also be the key to dealing with organizational change. We in positions of authority and responsibility tend to make the most expensive mistakes when we lose sight of the concept of balance. Balance planning for the future with the details of today; enforcing standards with tact and sensitivity; share of the market with the human touch; being able to lead with knowing what it means to follow. No matter how much change we incur or how much change we ourselves create, if we can remember to consider what will be best for all involved, our errors will be fewer, our satisfaction greater, and our sleep that much more filled with peace.