

## OUTLOOK 2000

### NOTES AND FACTS ABOUT THE FUTURE FOR TODAY'S STUDENTS

Only a generation ago, teachers could assume that students knew the value of being able to read quickly, write clearly, speak persuasively, and listen actively. It seems clear that today's students do not always see the importance of such skills. The statistics provided in this document were gathered over the last decade from a wide variety of sources. What they indicate will not come as a surprise to educators: (1) we are in the midst of an information explosion which has no end in sight; (2) the educational preparation of many of today's students is insufficient to meet the demands of the workplace; (3) to compete effectively in the workplace students must be able to digest complex material, use that information to solve problems, and communicate their recommendations persuasively and succinctly; (4) corporate involvement in education, particularly in the liberal and language arts, is an enormous investment, projected to reach \$200 billion by 2001; and (5) in the United States, the number of students whose primary home language is not English is increasing every year, placing extra demands on an already strained system.

An important objective of all educators must be to communicate such facts to students, who typically do not see that the problems might apply to them. Many view their verbal skills as adequate even though the chief executive officers of a host of companies repeatedly report the opposite. Somehow students, who often give education a low priority in their lives, must come to understand the gravity of the situation and the extent to which it applies to them. This is not an easy task since today's students often have many commitments outside the classroom. Furthermore, we, as their teachers, have not always shown them why they need to learn what we are attempting to teach them. The facts and notes listed below are intended to be used as topics for class discussion. The hope is that students may become more involved in their education if they understand why it is important.

#### 1. The information explosion.

- a. "A single weekday edition of *The New York Times* today contains more information than an average person in the 17th century would have encountered in a lifetime...New statistics show that the average person in a large corporation sends and receives an astounding 177 messages a day..." (Jennifer Tanaka, "Drowning in Data," *Newsweek*, 4/28/98, p. 85)
- b. "By the time today's kindergartners graduate from high school, the amount of knowledge in the world will have doubled four times. The Class of 2000 will be exposed to more information in one year than their grandparents encountered in their entire lives. They will have to assimilate more inventions and more information than have appeared in the last 150 years." (Marvin Cetron and Owen Davies, *American Renaissance*, New York, St. Martin's Press, 1989, p. 65)

- c. “Useful, job-oriented knowledge is becoming increasingly perishable. The half-life of an engineer’s professional information today is five years... Eighty-five percent of the information in U.S. National Institutes of Health computers is upgraded in five years.” (Marvin Cetron and Owen Davies, *Crystal Globe*, New York, St. Martin’s Press, 1991, pp. 361-2)

## 2. Educational preparation.

- a. “More than 6 million students attend the 2,819 four-year institutions full time, and 2.6 million more part time. One in four freshmen does not return as a sophomore [2.15 million students]. Half who matriculate do not graduate even in five years [4.3 million students].” (George F. Will, “Disorder in the Schools,” *Time*, 4/13/98, p. 84)
- b. In writing tests, roughly *two* percent of students in the eleventh grade “can write effective responses containing supportive details and discussion.” (Jay R. Campbell et al., eds, “Report in Brief, NAEP [National Assessment of Education Process] 1996 Trends in Academic Progress,” National Center for Education Statistics, p.12)
- c. “*Adult Literacy in America*, a 150-page survey conducted by the Princeton-based Educational Testing Service and released by the Department of Education, reported that roughly 90 million Americans over age 16 - almost half that category’s total population - are, as far as most workplaces are concerned, basically unfit for employment. ...Perhaps the worst news from the survey was the hubris expressed by those who were tested: when asked if they read well or very well, 71% of those in the bottom grade said yes.” (Paul Gray, “Adding up the Under-skilled,” *Time*, 9/20/93, p. 75)
- d. “...a very small pool of young people today appear educationally prepared for many of the occupations projected to grow most rapidly in the 1990-2005 period.” (*Outlook 1990-2005*, U.S. Department of Labor, Bureau of Labor Statistics, Bulletin 2402, May 1992, p.10)
- e. Although all business and government projections emphasize the need for a work force that understands other cultures and global concerns, seventy-seven percent of students graduate from a college or university without taking a foreign language, seventy-five percent of U.S. adults cannot locate the Persian Gulf on a map despite frequent news stories about the area, and forty-two percent of college seniors cannot identify the Koran as the sacred text of Islam. (Joseph H. Boyett and Henry P. Conn, *Workplace 2000*, Penguin, 1991, Chapter Nine)

## 3. Skills required in Workplace 2000.

- a. “The world of the early twenty-first century will be one in which learning must go on, out of necessity, throughout working life. In a global economy, increasing levels of competition create more and more change. The person who attempts to coast, only applying what he or

she has learned in the past, will have an increasingly difficult time being competitive in a tough global labor market. Economic forces will make 'grow or die' the maxim." (John P. Kotter, "Lifetime Learning," *The Futurist*, November-December, 1995).

- b. "American companies seem to have learnt three basic rules of the modern workplace: that no company can guarantee a worker a job for life; that the most important asset both for the worker and for the company is knowledge; and that, as technology and working methods change ever more swiftly, a worker continually needs to learn new skills." ("Those Who Can, Teach," *The Economist*, 10/28/95, p.79)
  - c. "Employers want managers who know how to communicate, who understand information systems, who are able to adapt to new markets in the global economy and who can institute change... 'What we're hearing is a demand for business communications and oral skills, how to organize data and present it clearly,' said Dean Arthur Baer of Drexel University's College of Business..." (Sherwood Ross, "Employers Demand More from MBAs," *Detroit Free Press*, 2/27/95)
  - d. "Since Workplace 2000 will be characterized by a tremendous increase in the availability of information, success in the organization will flow to those who can effectively use the data presented to them to modify their own behavior or to identify new opportunities for the organization. Americans who want to succeed will need the ability to analyze data, draw conclusions, and present recommendations." (Joseph H. Boyett and Henry P. Conn, *Workplace 2000*, Penguin, 1991, p. 5)
  - e. "Employers want workers who can quickly digest complex material and then be able to use the information they acquire to solve problems." (*ibid.*, p. 280) "Workers in the future must be good communicators. They must have the skill to express their ideas and convey information to others quickly and effectively. They must be good, active listeners, since much of the information they require to perform their jobs, solve problems, and work effectively with others will come from verbal interaction rather than written sources, which will be deemed too slow." (*ibid.*, p. 281)
4. Corporate concern and involvement in education.
- a. "The corporate investment in employee education and retraining is now some \$80 billion a year in the United States. It will approach \$200 billion by 2001." (Marvin Cetron and Owen Davies, *Crystal Globe*, New York, St. Martin's Press, 1991, p. 363)
  - b. "By the late 1980s, 64 per cent of America's largest companies listed education as their number one community-relations concern. David Kearns, chairman and CEO of Xerox, bluntly stated that the American workforce was running out of qualified people. 'If current demographic and economic trends continue,' Kearns said, 'American business will have to hire a million new workers a year who can't read, write, or count.'" (Joseph H. Boyett and

Henry P. Conn, *Workplace 2000*, Penguin, 1991, p. 267)

- c. “Americans who wish to acquire the skills necessary for them to play leadership roles in the workplace of the future face almost as great a problem as do those who simply aspire to decent employment. The reason for this is that the American institutions that should be preparing our future leaders - the American graduate school of business - is almost a total failure.” (*ibid.*, p. 294) “The failure of American business schools to prepare their students for leadership roles is so bad that a number of major companies such as Westinghouse, USX, and Marriot Corporation had abandoned or were no longer actively recruiting M.B.A.’s. And 858 of *Business Week’s* 1000 did no significant recruiting at business schools at all.” (*ibid.*, p. 296)

5. Some statistics on language.

- a. In Michigan, there are 569,807 people, five-years-old or older, who speak a language other than English at home. Of these, 12.3% (70,086 people) speak English poorly or not at all. (*Detroit News*, 4/28/93, p. 8A)
- b. Nationally, “in 1990, there were about 25.5 million U.S. adults age 18 and older who spoke a language other than English at home, up from 17.9 million a decade earlier, according to Census data.” (“Adult Participation in English-as-a-Second-Language (ESL) Classes,” National Center for Education statistics, May 1998, p.1)
- c. At least half of the 470 public schools in Oakland County require someone to teach ESL (English as a Second Language) on an ongoing basis because an ever-growing number of children in Oakland County do not have English as their native language. (Jacqueline Moase-Burke, Consultant in ESL for Oakland Schools, personal communication)