Chapter One

The Social Context of Adult Learning

Learning, even self-directed learning, rarely occurs "in splendid isolation from the world in which the learner lives; . . . it is intimately related to that world and affected by it" (Jarvis, 1987, p. 11). What one wants to learn, what is offered, and the ways in which one learns are determined to a large extent by the nature of the society at any particular time. Contrast the young male apprentice of colonial times learning to be a blacksmith with today's middle-aged woman learning a new software program, or the preparation needed to become a medical doctor at the turn of the twentieth century—less than a high school diploma—with today's long and specialized training.

It can also be argued that the nature of society at any particular point in time determines the relative emphasis placed on adult learning. In preindustrial societies, the rate of change was such that what a person needed to know to function as an adult could be learned in childhood. In societies hurrying to catch up, however, and in our own society with its accelerated rate of change, the urgency of dealing with social realities is felt by adults. Society no longer has the luxury of waiting for its youth. As Belanger (1996) notes, "The question is no longer whether adult learning is needed, and how important it is. The issue today is how to respond to this increasing and diversified demand, how to manage this explosion" (p. 21). Youth, in fact, "who are sent out into life with a dwindling sackful of values, . . . face a situation in which they have to keep filling up their sack. This leads adult education to take 'lifelong learning' as its motto." Further, "the hole in the ozone layer

provides the stimulus for courses to which people turn for advice, mad cow disease pushes up the numbers attending vegetarian cooking courses, and backache creates a need for posture classes" (Geissler, 1996, pp. 35–36).

While adult education is responsive to the context in which it takes place, it also in turn affects that same context. Take, for example, enormous changes in our society brought on by computer technology. Auto mechanics must now be trained to diagnose engine problems using computers; you can save time at the local grocery by doing your own scanning, bagging, and checkout all by computer; airline boarding passes can be accessed at home; and so on. Adult education has responded to this computerization of our world by offering courses—courses where we can learn this technology so that we can better function in our digital environment. But the fact that millions of adults have become computer literate interacts with our environment in that we now *expect* to use our skills in an ever-widening range of applications—forcing institutions and agencies to adopt and expand these technologies.

Although the preceding are particularly contemporary examples, historically there has always been an interlocking of adult learning needs with the social context in which they occur. The skills needed in colonial America reflected the agrarian context; further, since early settlers were fleeing religious persecution in Europe, there was a moral and religious imperative in learning to read so that one could study the Bible. After the revolutionary war, the newly independent nation needed leaders and informed citizens to build the democratic society. Eclipsing religious education, civic education, which included learning about philosophy, science, and politics, became paramount in the education of adults.

With the Industrial Revolution of the late nineteenth and early twentieth centuries, industry-based skills training became a necessity. Also, because of the massive influx of immigrants to the United States at this time, "Americanization" and citizenship programs became a prominent form of adult education. It was felt that these immigrants needed to learn the ways of their adopted country so that they would "melt" into society. Interestingly, immigrants themselves organized their own schools to maintain their culture, but these were largely invisible to society at large.

Although a major thrust of adult education at any particular time reflects the sociohistorical context, varied purposes and learning

interests coexist. We might argue that technology is a major thrust of learning today, but there is still job-training, literacy, civic education, liberal (such as Great Books clubs) and leisure learning, along with community-based social-action initiatives. As Stubblefield and Keane (1994, p. 312) observed from their survey of adult education from colonial times until the present, regardless of the historical era, "Americans learned because there was knowledge to master, technology to adapt, and life's uncertainties to be resolved."

Thus, to a large extent, the learning that goes on in adulthood can be understood through an examination of the social context in which it occurs. How is learning in adulthood shaped by the society in which it takes place? How does the sociocultural context determine what is learned and by whom?

This chapter explores three conditions characteristic of the current sociocultural context that are shaping the learning needs of adults in today's world: changing demographics, the global economy, and information and technology. Although we present each of these separately at first, these three factors are very much interrelated, and thus their convergence and subsequent impact on learning in adulthood are discussed in the final section of this chapter.

CHANGING DEMOGRAPHICS

Changing demographics is a social reality shaping the provision of learning in contemporary American society. Demographics is about people, groups of people, and their respective characteristics. For the first time in our society, adults outnumber youth, there are more older adults, the population is better educated than ever before, and there is more cultural and ethnic diversity. For various reasons, individuals and groups of people seek out learning experiences; for other reasons, society targets learning activities for certain segments of the population. Thus, certain learning activities are learner-initiated and others are society-initiated in response to the changing demographics. The field is concerned with the growth and development of adult learners, while at the same time, there are emerging groups of learners with special needs.

To begin, there are simply more adults in our society than ever before, and the population will continue to age. In comparison to colonial times when half the population was under age 16, in 1990,

fewer than one in four Americans were under age 16 and half were age 33 or older. The median age of the American population of 36.0 years in 2004 is expected to increase to 39.1 in 2035 (U.S. Bureau of the Census, 2004b). The so-called baby boomers—the seventy million people born between 1946 and 1964—are a contributing factor to this change in the population. Bills (2004, p. 122) notes that "the baby boom has influenced all American social institutions—health care, housing, consumerism, retirement, even death and the projected 'tomb boom'—but none more than education and work." Although we might hear more about youth, they have less of an impact on the economy than the boomers. "In America, they [over-50s] control four-fifths of the money invested in savings-and-loan associations and own two-thirds of all the shares on the stock market" ("Over 60 and Overlooked," 2002).

The shift from a youth-oriented to an adult-oriented society is solidified by the increasing numbers of older adults in the population. In 1987, for the first time ever, Americans over the age of sixty-five outnumbered those under twenty-five. Furthermore, the oldest old, those over eighty-five-years old, are the fastest-growing segment of the older population. As of July 1, 2004, there were more than four million eight hundred thousand adults over eighty-five-years old, an increase of 13.4 percent from the 2000 census (U.S. Bureau of the Census, 2005). The number of adults over age eighty-five is expected to increase to about seven million in 2020 and to twenty million in 2050 (U.S. Bureau of the Census, 2004b).

Today's older adults are also increasingly better educated, in better health, and economically better off than previous cohorts. Society is already heeding their learning needs with policies like tuition waivers for higher and continuing education programs and specially designed programs, such as the popular Elderhostel program and learning-in-retirement institutes. There has also been a subtle change in the philosophical rationale—at least among those working in the fields of gerontology and educational gerontology—underlying the provision of education for this group. Along with an economic rationale (the better educated need fewer social services) and a social stability rationale (millions of healthy retired people need something to do) is an awareness that older adults as well as younger ones have an unending potential for development. Williamson (1997, p. 175) suggests that our culturally endorsed notion about what represents "appropriate" learning over the

course of the life span tends to "reinforce prevailing myths about retirement and aging as processes of withdrawal and decline." This mindset ignores the exciting possibilities for personal growth and societal contributions among older members of the population. As Thomas (2004, p. 31) observes, "There is great power hidden with old age, but we will remain ignorant of the depth and breadth of that power as long as we insist on simply comparing youth to age."

Thus, more adults and an increase in the number of older adults are two demographic factors influencing the provision of learning activities in our society. So, too, is the rising level of education characteristic of our population. This is dramatically illustrated by the fact that 83 percent of today's twenty-five- to thirty-four-year-olds have completed high school compared with 65 percent of adults age sixty-five and over (U.S. Bureau of the Census, 2000). Since previous education is the single best predictor of participation in adult education, the rising educational level of the adult population is a contextual factor of considerable import. Participation data from the Center for Education Statistics show, for example, that 22 percent of adults with fewer than four years of high school participate in organized adult education, while 34 percent of high school graduates and 66 percent of college graduates do (Kim, Collins Hagedorn, Williamson, & Chapman, 2004).

Nevertheless, even as the educational attainment level of the population as a whole continues to rise, an alarming number of high school students drop out before graduating. And "as a high school education becomes the minimum educational standard, those who drop out are more likely to become members of an educational underclass, from which adult education (especially in the form of adult basic and secondary education) may be the only hope of escape" (Rachal, 1989, pp. 10–11). Unfortunately, as mentioned earlier, adults with less than a high school diploma are least likely to participate in adult education activities overall, with only 6 percent in work-related courses, 7 percent in basic skills education, and 1 percent in vocational or technical diploma programs (Kim et al., 2004).

Another demographic characteristic of the social context is the growing cultural and ethnic diversity of America's population. In contrast to the influx of European immigrants at the end of the nineteenth century (which continued into the middle decades of the twentieth), today's immigrants are more likely to come from

Asia and Latin America. In 2002, for example, 52 percent of U.S. immigrants were from Latin America, 25 percent from Asia, and only 14 percent from Europe (Alfred, 2004).

If current trends in immigration and birthrates persist, it is projected that between the years 2000 and 2010, the Hispanic population will account for 34.1 percent of the total population growth, Asians about 33.3 percent, and African Americans 12.9 percent (U.S. Bureau of the Census, 2004b). In 2001, Hispanics became the largest minority group in America, with African Americans the second largest (U.S. Bureau of the Census, 2005).

Furthermore, the average age of minority populations is decreasing, while the majority population is growing older. For example, in 2004 the median age of Hispanics was 26.9 years whereas that of the White population was 40.0 years (U.S. Bureau of the Census, 2005).

Not only is the composition of the minority population changing, so too are the overall numbers. In 2000, minorities made up 31 percent of the population; by 2050, minorities will account for nearly 50 percent of the overall population (U.S. Bureau of the Census, 2004b).

The socioeconomic and cultural diversity of today's immigrant population presents special challenges to adult educators. As Alfred (2004, p. 14) observes:

> Today's immigrant population reflects a pattern of demographics that reveals deep polarization between the most educated and wealthiest and the least educated and poorest. This emergent pattern of immigrant adaptation seems to follow a new hourglass segmentation found in the U.S. economy and society (Sparks, 2003; Suarez-Orozco & Suarez-Orozco, 2000). Noticeably, there are those immigrants who are quickly achieving upward mobility, primarily through education and high-tech jobs, while on the opposite end of the hourglass, large numbers of low-skilled workers find themselves locked in low-wage service jobs. Those in between approximate norms of the majority culture and disappear into U.S. cultural institutions without much notice (Sparks, 2003). This polarization in the composition of the immigrant population suggests that planners of adult and higher education programs face a challenging task as they attempt to meet the variety of needs and expectations that immigrants bring to the new country.

The growing ethnic and cultural diversity of our population was identified over fifteen years ago by Naisbitt and Aburdene (1990) as one of the megatrends of the twenty-first century. They observed that "even as our lifestyles grow more similar, there are unmistakable signs of a powerful countertrend: a backlash against uniformity, a desire to assert the uniqueness of one's culture and language. . . . Outbreaks of cultural nationalism are happening in every corner of the globe" (p. 119). Adult educators are slowly becoming aware of the instructional implications of the fact that "as our outer worlds grow more similar, we will increasingly treasure the traditions that spring from within" (Naisbitt & Aburdene, 1990, p. 120).

In summary, the composition of society is an important factor in the provision of learning opportunities for citizens of all ages. In the United States, there are more adults than youth, the number of older adults is growing, the population as a whole is better educated than ever before, and the population is more diverse—racially, ethnically, and culturally—than ever before.

Globalization

Globalization is an overarching concept encompassing changes taking place worldwide. But globalization is not a new concept because it can be argued that the world has always sought to connect through travel, trade, and cultural exchange. "Although it builds on a history of international relations between nation-states, it is new in the sense of the growing extensiveness of social networks involved, the intensity and speed of flows and interconnections within these networks, and the reach of its impact" (Glastra, Hake, & Schedler, 2004, p. 292). Since the 1980s, the term has been used to reflect the increasing integration of economies around the world, particularly through trade and the flow of finances. In addition to finances, this "flow" also includes the movement of people and information. One definition of globalization is "a movement of economic integration, of cultural homogenization, and of technological uniformization" (Finger, 2005b, p. 269). An incredibly complex and controversial phenomenon, we can only try to convey some of its essential characteristics and some of

the issues and speculate as to how it is shaping adult learning in our context.

Images most associated with globalization are economic, having to do with the loss of low-wage manufacturing jobs to less developed corners of the world, with transnational companies operating in a space outside national boundaries and control, with consumerism and commercialism supplanting all other interests. As one writer observed, globalization is resulting in the world becoming "one big shopping mall" (Cowen, 2003, p. 17). Although the market economy is clearly a driving force in globalization, so too is information technology. Changes in information technology "almost make state boundaries redundant in respect to the flow of information across the globe" (Jarvis, 2004, p. 3).

But globalization is not only about economics. Brysk (2003, p. 22) contends that it is combination of four elements:

- *Connection* means greater traffic in bodies, goods, services, and information across borders.
- *Cosmopolitanism* describes the growth of multiple centers of power and influence above, below, and across national governments: international organizations, grassroots groups, and transnational bodies from Microsoft to Greenpeace.
- *Communication* is an increase in technological capacity that strengthens transnational networks of all kinds (from multinational corporations to nongovernmental organizations [NGOs] to terrorists) and diffuses ideas and values more quickly and broadly.
- *Commodification* is the expansion of world markets, and the extension of market-like behavior across more states and social realms. Increases in global capital flows, privatization of formerly state-owned enterprises, and increasing employment of children are all examples of commodification.

Brysk goes on to show how these elements of globalization are both a plus and a minus for human rights issues: "Connection brings human rights monitors to Chiapas, but it also brings sex tourists to Thailand. Cosmopolitanism creates a U.N. Human Rights Commission and countless NGOs to condemn China's abuse of political dissidents and religious minorities; yet commodification makes China the United States's second-leading trade partner" (p. 22).

Part of the controversy surrounding globalization has to do with economics. Those countries that can be competitive are already better off and become even richer through globalization, while others "like Zambia are virtually excluded from the market. Similarly, those people who are employable can—if they wish—play an active part (to greater or lesser extent) in being citizens, but those who have no job are socially excluded" (Jarvis, 2004, p. 5). That globalization is exacerbating the differences between rich and poor is creating ethnic hatred and global instability, argues Chua (2003). The United States, for example, is home to only 4 percent of the world's population but is "seen everywhere as the principal engine and principal beneficiary of global capitalism. We are also seen as 'almighty,' 'exploitative,' and 'able to control the world,' whether through our military power or through the IMF-implemented austerity measures we have heartlessly forced on developing populations" (p. 16). Is it no wonder, she asks, that we are the object of mass resentment?

Finger (2005b) echoes this same sentiment in his observations of cultural globalization underlying global consumption. With the movement of goods, people, ideas, and cultural artifacts across borders, the global culture is characterized not by diversity but "by the spread of individualism, Western values, and homogenization in general. Yet, simultaneously, cultural globalization is triggering numerous cultural reactions against this very process, leading, among others, to fundamentalism" (p. 270). September 11, 2001, and other terrorist attacks are the deadly consequences of ignoring this resentment.

What does all this mean for adult learning? For one thing, "it does a worker very little good to train specifically for a job with a company that outsources the position, downsizes, or sells to a foreign owner who reorganizes or 'reengineers' the company, selling off pieces, leaving the worker trained and unemployed" (Tomlin, 1997, p. 20). Global economics has led to changing work practices, which require different kinds of preparation and training. This has resulted in the control of education shifting to business. The emphasis now is on improved product and service quality, greater worker responsibility, and teamwork approaches. Adult education and human resource development, in particular, have responded with broad-based workplace literacy programs and training and development packages designed to address a wide

range of economy-driven needs. Globalization's effect on adult education has even reached "the professional and executive training area, by either helping individuals and firms take advantage of commercialization and industrial development, or by supporting individuals in coping with the negative consequences of the same commercial developments" (Finger, 2005b, p. 272). Indeed, human resource development (HRD) and corollary concepts such as organizational learning have become a parallel adult education system, one lodged in the workplace where responsiveness to globalization is paramount.

The global economy is having an impact on learning in broader ways too. We have become, in the words of Usher, Bryant, and Johnston (1997, p. 4), "a culture of consumption. . . . The factory, the assembly line, large-scale manufacturing—are being increasingly displaced by centres of consumption—financial services, small-scale specialised enterprises, shopping malls and superstores, entertainment complexes, heritage and theme parks." This shift is evidenced in a changing relationship between educator and learner to one of a "market relationship between producer and consumer. Knowledge is exchanged on the basis of the performative value it has for the consumer" (p. 14). Educational institutions themselves "become part of the market, selling knowledge as a commodity and increasingly reconstructing themselves as enterprises dedicated to marketing their commodities and to competing in the knowledge 'business'" (p. 14). As Hadfield (2003, p. 19) observes, "*Customer* is exactly how adult learners think of themselves, and they hold our institutions of higher education accountable for providing paid-for results and educational experiences that make a difference in their lives. They pay for these experiences with precious resources, not the least of which is their time. They are savvy, demanding customers who know how to shop. When they do not find what they want at one school, they transfer to another."

This shift to the marketplace as the primary site of adult learning has divided adult educators into deciding "whether to locate their practice in civil society or the economic sector" (Cunningham, 2000, p. 577). Others are concerned that adult education has lost its social action perspective; rather, "adult education practice in the age of globalization increasingly becomes a toolkit for quick

fixes by means of tailor-made and individualized short-term, yet lucrative, trainings" (Finger, 2005b, p. 272). Schied, Mulenga, and Baptiste (2005) suggest educators should confront "the totalizing gaze of the ideology of globalization as an inevitable force of nature because it negates the centrality of human agency" (p. 397). Adult educators need to become involved in "building capacities for local groups to engage and confront globalization and its effects" at all levels—local, national, and international (p. 397).

Intertwined in globalization is a shift from a society employed in producing goods to one employed in providing services. The decline in industrial labor stems from automation and competition from other countries with low labor costs. Dislocated workers from both the industrial and agricultural sectors, with few if any transferable skills, find themselves in low-skill, low-paying service jobs. Ironically, the availability of displaced workers with limited employable skills leads to equally low wages in the service sector, thus promoting the general growth of the service sector. Referring to a report by Hecker (2001), Bills (2004) observes that the fast growth of the service sector is paralleled by fast growth in professional and related occupations. "The important thing about these projections is that these two occupations are at the opposite ends of the education and earnings distribution. That is, professional occupations require extensive educational preparation and are generally well-rewarded. Service jobs require lower educational credentials, with corresponding lower job rewards" (p. 97).

Concurrent with the shift to a service economy is the shift to what has been called the information society—a shift that has had a major impact on workers as economic units. "In an industrial age, workers are expendable cogs in the machine; in an information age (and to a lesser extent, in a service age), human capital is the most valuable capital an organization has" (Bills, 2004, p. 20). The implications for learning—and in particular for work-related training—are enormous. Already the amount spent annually by business, industry, and government agencies on job-related training is in the billions of dollars and exceeds that spent on public higher education. Furthermore, because skills learned in preparation for a job or career cannot keep pace with the demands of the world of work, the ability to learn becomes a valuable skill in and of itself. This factor is underscored by the fact that 50 percent of all

employee skills become outdated in three to five years (Shank & Sitze, 2004); in high-tech areas workers may need to learn to operate a new machine, or a new software program, or a new hardware configuration every eighteen months or less (Desimone, Werner, & Harris, 2002).

Developing simultaneously with the emphasis on learning to learn is the notion of the learning organization (see Chapter Two). To survive in the global economy, an "organization needs to evolve into 'a learning organization' whereby new and expansive patterns are permitted, allowing employees to learn individually and collectively (continually learning how to learn)" (Gardner, 1996, p. 43). The growing body of literature on the learning organization positions learning, information processing, and problem-solving skills as central to the survival of both the individual worker and the organization. Ulrich (1998) underscores how globalization necessitates the creation of learning organizations. Globalization requires companies "to move people, ideas, products, and information around the world to meet local needs. They [companies] must add new and important ingredients to the mix when making strategy: volatile political situations, contentious global trade issues, fluctuating exchange rates, and unfamiliar cultures. They must be more literate in the ways of international customers, commerce, and competition than ever before. In short, globalization requires that organizations increase their ability to learn and collaborate and to manage diversity, complexity, and ambiguity" (p. 126).

Closely related to shifts to a service and information economy are changes in America's labor force. The largest job-growth categories are jobs in health and service (such as foodservice) followed by jobs in education, training, and sales and related occupations (Hecker, 2004).

Not surprisingly, women, minorities, and the elderly are overrepresented in the lower-paying service jobs. Since the middle of this century, however, the labor force has changed from one dominated by blue-collar occupations to one where the majority of jobs are considered white collar. Significant changes in the composition of the workforce are also occurring along racial and ethnic lines. Although White non-Hispanic workers account for the great majority of workers (81 percent in 2005; U.S. Bureau of Labor Statistics, 2005), their rate of growth is much lower than the rate of

growth for the Black, Asian, and Hispanic groups. According to the U.S. Bureau of Labor Statistics (2005), in 2005 Hispanics were the second-largest ethnic worker group (13 percent) and African Americans the third group at 11 percent.

Perhaps the greatest change of all has been the steady increase of women in the workforce. In 1960, 37.7 percent of women in the population were members of the workforce, compared with 59.2 percent in 2004. Currently, women represent 46 percent of the total United States labor force (U.S. Department of Labor, n.d.). Economic necessity and the freeing of occupations traditionally assigned to men have contributed to this change.

In summary, economic factors are shaping the nature of our society, and by extension, the nature of learning that adults are most likely to undertake. A global economy, the shift to a service and information society, and consequent changes in the configuration of the labor force are determining to a large extent where learning takes place, what is offered, and who participates.

TECHNOLOGY

There is no more apt metaphor for reflecting the rate of technological change than the computer. Itself a major component of our highly technological age, computer language has invaded the ways in which we talk of adult learning. We process students and information; we plan learning activities with an eye to inputs, flow, and outputs; we provide feedback to individual learners and to programs. Indeed, we program learning experiences and ourselves. Technology has had an enormous impact on society and adult learning. It has been instrumental in bringing about the information society, which has created new jobs and eliminated others. And as we have seen, globalization is technology driven.

The move to an information society has been a function of technological developments associated with an information explosion. Within a short span of time, electronic, communication, and information technologies have changed society as a whole and affected how people go about their daily lives. From ordering pizza by computer, to instant communication via the cell phone, to faxing a request to the local radio station, everyday life has been irrevocably influenced by technology.

Concurrent with these technological advances has been an information explosion. Lyman and Varian (n.d.) estimated that in 2002 about five exabytes (one exabyte equals over one billion gigabytes) of new information were produced: "Five exabytes of information [are] equivalent in size to the information contained in 37,000 new libraries the size of the Library of Congress book collections" (¶ 2). They also estimated that "the amount of new information stored on paper, film, magnetic, and optical media has about doubled in the last three years" (¶ 3). Others have speculated that half of what most professionals know when they finish their formal training will be outdated in less than five years, perhaps even in months for those in technology-related careers. Thus, the need for continuing education has dramatically escalated with the increase in knowledge production. There is not only considerably more information than ever before, but its storage, transmission, and access have been made more feasible than ever before through links with technology.

Laser technology, in particular, is revolutionizing the dissemination of information, as well as its storage and retrieval. A compact disk using laser technology makes it possible to store huge amounts of information in a very small space, and the Internet and World Wide Web have become repositories for more information than any one person could access in a lifetime. Also promoting the explosion of information is the decreasing price of magnetic media. According to Lyman and Varian (n.d.), in 2002, magnetic media, primarily hard disks, stored 92 percent of new information. Film stored 7 percent of the total new information, paper 0.01 percent, and optical media 0.002 percent. Huge amounts of information and the development of technology that finds and easily retrieves this information have had a significant impact on teaching and learning from public school through graduate and adult education.

A major societal shift, such as moving from an industrial to an information society, results in profound changes in the society's structure. In an industrial society, machine technology extended physical ability; in an information society, computer technology extends mental ability. Material wealth has great value in an industrial society; knowledge and information are key assets in an information society. The social structure changes from hierarchies and

bureaucracies to multicentered and horizontal networks. These changes in society's underlying structure can be seen most dramatically in changes in the workforce. As noted earlier, the shift is eliminating certain classifications of work while creating others not previously dreamed of.

In addition to the creation and elimination of jobs, technological changes are affecting workers in other ways, such as where work is done. As Gardner (1996, p. 48) observes, "Computer technology frees labor from a particular location. . . . Knowledge workers can work anywhere; they simply have to have access to a computer connection. Even within the team framework, workers can stay engaged in their mutual tasks even if not in close proximity to each other. Delocalizing work has been touted as one of the more appealing aspects of technological advances in the workplace." Telecommuting, or *home work,* some assert, has increased because of the new technologies, and it is considered desirable because it fits in with alternative family patterns (such as more single-parent families), worker concerns for control of time and work site, and organizational efforts to cut costs and remain flexible by contracting out for services rather than hiring more workers. Estimates of the number of people who currently telecommute vary because of different interpretations of this new work structure. However, estimates from a 2001 national survey found that nearly twenty-nine million, or one in five U.S. workers, participated in some form of telecommuting, and this number was expected to increase to more than forty million by 2010 (Potter, 2003).

Yet others have cautioned against the unquestioning adoption of technology in the workplace, for information technologies have created something of a paradox. Designed to get more work done more efficiently by fewer employees, information technologies have instead offered more ways to communicate, increased the demand for information, and raised the level of expectations with regard to the print and graphic presentation of material. Think of the volume of mail one now handles through e-mail; this technology seems to have increased our workload and expectations of timely responses.

Clearly, technology and the information age that it spawned are changing the nature of adult learning. Professionals whose knowledge becomes outdated in a few years, auto mechanics who

must now master sophisticated electronic diagnostic systems, adults who must learn new ways to bank or shop from home computers: all must be able to function in a fast-changing society, and this necessitates continued learning. Technology is not only making learning mandatory, it is providing many of the mechanisms for it to occur. Computer-assisted instruction, teleconferencing, interactive videodisk, the Internet, and the World Wide Web are expanding the possibilities of meeting the growing learning needs of adults.

Simultaneous with the development of technologically sophisticated delivery systems is the development of new roles for educators and trainers. Having access to unlimited information is not the same as being able to search efficiently for the most significant information, or even to know what is most significant. Heclo (1994, p. B2) states that "in the long run, excesses of technology mean that the comparative advantage shifts from those with information glut to those with ordered knowledge, from those who can process vast amounts of blab to those who can explain what is worth knowing and why." Ratinoff (1995, p. 163) points out that the information explosion has had both positive and negative effects: "On the positive side, the myths and riddles of power are more exposed to public scrutiny. To fool all people is very difficult under the present circumstances." On the downside, "information has been growing faster than the individual and institutional capacities required to make sense of the new diversity of signals and messages" (p. 164).

Whitson and Amstutz (1997) suggest a number of strategies for dealing with the information and technology overload. First, adult educators should "build more and better connections with those who directly teach information access skills," especially librarians, but also computer specialists (p. 133). Educators can also focus on developing students' "higher-level thinking skills" so that judgments can be made about the credibility and usefulness of information (p. 137). Since much information is available electronically through the Internet and the World Wide Web, the authors underscore the need for educators themselves to become comfortable in this environment, to the point that they can help learners take advantage of technology. Finally, "we have an obligation to consider the ethical implications of our information access processes. . . . The rights of poor people to have access to information and the ways in which

information should be made accessible to them are important concerns. We need to resist the growing tendency for business, industry, and government to control access to information" (p. 141).

The more affluent and better-educated adults with home computers have access to information and instructional packages that make them even more informed. On a global level, the "have" nations can communicate and exchange information in ways that will never be a reality for the majority of the world's people. Even job training necessitated by technological change tends to favor the haves.

Nevertheless, technology's potential for increasing access to learning for people of all ages and possibly all economic levels is unlimited. In more and more communities, computers can be found in libraries, restaurants, Laundromats, and other public places. Naisbitt and Aburdene (1990) argue that technology is "empowering." In their opinion, "there are fewer dictators on the planet today because they can no longer control information. . . . Computers, cellular phones, and fax machines empower individuals, rather than oppress them, as previously feared" (pp. 303–304). Finally, "the proliferation of information technologies and exponential increases in the production of information have created greater opportunities for informal learning . . . for people in all walks of life" (Livingstone, 2001, p. 20).

THE CONVERGENCE OF DEMOGRAPHICS, GLOBALIZATION, AND TECHNOLOGY

Demographics, globalization, and technology are closely entwined with each other. Advances in technology, for example, are interrelated with changes in the economic structure. Automation and robotics displace production workers but create other jobs. Technology creates alternative work structures. The need to be competitive in the world market leads to further technological sophistication. Demographics and economics are clearly related. The baby boom cohort that is now in the labor force, for example, is saturating middle- and upper-management career levels, forcing younger people to consider career alternatives. In another example, the growing number of older adults in our society is having several effects on the economy. Some older adults are being asked

to retire early to make room for younger workers; with increased longevity and good health, others are pursuing second or third careers; and some employers, especially those in the service sector, are recognizing the human resource potential of this group and are actively recruiting older workers.

Embedded in this convergence of demographics, economics, and technology is a value system based on the political and economic structure of capitalism. Nearly two decades ago, Beder (1987, p. 107) explained how these three forces are linked in the value system: "The beliefs undergirding the capitalist system emphasize material values. The health of the system is gauged in terms of national wealth as embodied in the gross national product, and social equality is assessed in terms of economic opportunity—the potential of members of the underclasses to amass more income. Hence, the political and social systems become directed toward . . . economic productivity, and economic productivity under the rationale of human capital theory becomes the predominant rationale for all publicly funded social interventions including adult education." This value system directly shapes adult education in the United States in several ways. First, economic productivity becomes "the dominant rationale for all public subsidy of adult education" (p. 109). Second, social justice becomes equated with economic opportunity in that "the just society is a society that provides opportunity for members of the underclasses to amass more income and material goods" and adult education "helps learners acquire the skills and knowledge" to do so (p. 109). The emphasis is on productivity and efficiency, both of which benefit from advances in technology. Thus technology, in the service of economic productivity, converges with changing demographics in shaping the adult learning enterprise.

Nowhere is this more visible than in higher education. Before globalization and the market economy, higher education was a local enterprise serving a predominately local or national constituency. Academic foci shaped the nature of the student body and concerns of the institution. With the shift to a consumer approach to higher education, the institution worries about its "brand" appeal, its profitability, its "share" of the market. Globalization in conjunction with communication technology is reshaping higher education in terms of:

- International communications-based telecommunications, information, and media technologies, which facilitate transnational circulation of text, images, and artifacts,
- International movement of students to study in other countries as well as a demand for online courses without a residency requirement in another country,
- Increasing multicultural learning environment whether online or on campus,
- Increasing global circulation of ideas and particularly Western pedagogical systems and values,
- Rise of international and virtual organizations offering Web-based education and training. [Mason, 2003, p. 744]

There are problems with the globalization of higher education, however, not the least of which is its lag behind economic deregulation; that is, credit transfer is a serious barrier even inside a country, let alone across borders. Further, those countries without the technological infrastructure will be "disenfranchised." And assuming there are those who have access, how ready "are the potential students of global education . . . to be self-directed, self-motivated, and resourceful e-learners?" (Mason, 2003, pp. 744–745).

As already pointed out, a number of writers would like to see the values and purposes of adult education reexamined in the wake of the wide-scale social and economic changes taking place. In a postmodern world characterized by large-scale changes in global activity resulting in economic, social, and political uncertainty, adult education tends to be an entrepreneurial instrument of the so-called new world order. Adult education is particularly sensitive to a restructured workplace, reliance on technology to produce knowledge, and a market demand for multiskilled workers. Petrella (1997) emphasizes the decreased importance placed on individuals in the new market economy in observing that humans as "resources" take precedence over humans as human beings. As well, knowledge has become an important business commodity that is readily marketed, due, in part, to the explosion of the Internet and other information technologies. Finger (2005b) and others (Cunningham, 2000; Schied, Mulenga, & Baptiste, 2005) believe that adult education is in danger of losing its social action orientation as it focuses on helping individuals cope with

the overwhelming economic and other challenges that threaten their identities and survival. Learning in a global community can be empowering but it "can also serve as a mechanism for exclusion and control. The move to a knowledge-based economy means that those who have the lowest level of skills and the weakest capacity for constant updating are less likely to find sustainable employment" (Schied, Mulenga, & Baptiste, 2005, p. 396).

While globalization has extended economic and cultural boundaries, it has also served to fragment society in many ways. For example, although minorities and other ethnic groups may be perceived as valuable contributors in a society, conflict results when scarce educational and other resources are allocated. Minority groups may become more isolated from mainstream society. In other ways, too, individuals in a society may experience fragmentation as they struggle to make sense of their disordered and sometimes disrupted lives. In a time when nations, companies, and families are splintering, there is little sense of security. Job security in particular no longer exists: "A new bargain replaces the old social contract between employers and workers that ensures security of employment in return for good and loyal work effort. Some employers now agree to maintain the future employability of workers through education and training in return for good performance" (Maehl, 2000, p. 20).

If the postmodern world is characterized by fragmentation and diversity, it is also characterized by new alliances and interactions. Demographics, the global economy, and technology have come together in adult education in the blurring of the field's content and delivery mechanisms. For example, adult education has been variously divided into formal, nonformal, and informal learning activities (see Chapter Two). Formal learning takes place in educational institutions and often leads to degrees or some sort of credit. Nonformal learning refers to organized activities outside educational institutions, such as those found in community organizations, cultural institutions such as museums and libraries, and voluntary associations. Informal learning refers to the experiences of everyday living from which we learn something. Today, many formal providers offer learning experiences that are noncredit, leisure oriented, and short-term. Similarly, nonformal learning and informal life experiences can be turned into formal, credit-earning activities.

Another blurring can be noted in higher education. Once composed of learners eighteen to twenty-two-years old, the student body has grayed along with the population. In fact, students twenty-five years of age and older now make up close to 50 percent of all college enrollments in the United States (Kasworm, Sandmann, & Sissel, 2000). Similar subjects may be taught at the local community college for credit and at the public adult school for noncredit. The part-time adult student taking a course during the day at a college is an adult learner as much as the sixteen-year-old studying for a high school diploma in a local evening class. There is also a blurring between higher education and business and industry. Many postsecondary institutions have business institutes that provide training and development services to business. Conversely, a growing number of private companies, such as McDonald's Hamburger University and the Rand Graduate Institute, are offering accredited degrees (Eurich, 1990).

Finally, a blurring of content and delivery is found in such popular slogans as "workplace literacy," "learning to learn," "critical thinking," and "media literacy." Educators, employers, and society at large are focusing attention on developing the skills needed to be productive and informed members of a fast-changing and highly technical society. With the erosion of boundaries in the content and provision of adult learning, we may be witnessing the emergence of what has been called the *learning society*. Taking human beings rather than educational institutions as its beginning point, the learning society is a response to the social context.

SUMMARY

Adult learning does not occur in a vacuum. What one needs or wants to learn, what opportunities are available, the manner in which one learns—all are to a large extent determined by the society in which one lives. This chapter has discussed several characteristics of American society today that are shaping the nature of learning in adulthood.

Demographics, globalization, and technology are three forces affecting all of society's endeavors, including adult learning. With regard to the American population, adults outnumber youth, there are more older adults, adults are better educated, and there is more cultural and ethnic diversity among the population than ever before.

Globalization is linking the world through economics and consumerism, but there is also a cultural dimension to globalization. Unfortunately, even the cultural aspects of globalization are Western dominated (Finger, 2005b), a factor leading to resentment and terrorist activity.

Technology is integral to the global economy and has contributed to, if not caused, the shift to an information society, which is creating dramatic changes in the workforce. Although we have treated them separately, these three forces are interactive and firmly embedded in the American capitalist value system. Adult education both reflects and responds to the forces prevalent in the sociocultural context. Among the implications discussed in the chapter are the field's responsiveness to special groups of people, the economic productivity rationale behind much of adult education, the potential of technology for enhancing or impeding learning, and the blurring of content and delivery in current adult education.