

Diverse Students

Writing in late 1999 for Long Island's newspaper *Newsday*, Saul Friedman recounted the story of two senior citizens who signed up for a course at a community college. At the first class meeting, Friedman wrote, the teacher intoned: "This is not a course for seniors. Seniors think more slowly and can't absorb at the speed of the other students. I won't slow down for you people." That attitude is diametrically opposed to the spirit which infuses this book. As educators, we not only should accommodate nontraditional students; we will find, often to our own surprise, that by doing so, we enrich the educational experience for all our students.

Ironically, Friedman went on to observe that the community college teacher had been "overwhelmed" by the "unexpected number" of seniors who enrolled in the course. He should not have been surprised. At the turn of the century, much of the growth in education is directly due to increased numbers of nontraditional students. To meet their needs, we need to apply the teachings of "universal design" to education. The Baby Boom generation, a 76-million strong cohort often described as a "pig in a python" because it is so much bigger than the generations before and after it, has already reached their 50s. Over the next 30 years, Boomers will retire and the number of elderly Americans will double. Already, the demographics of higher education have changed considerably. A generation ago, virtually all university students were in the 18 to 24-year-old cohort; today, those young adults represent just over half of the undergraduate population. According to *The Chronicle of Higher Education Almanac* (August 26, 1998), in 1995 (the latest year for which data were available), 57% of students in higher education were 18-24 years of age, 40% were 25-49, and 4% were over 50 years of age. The latter two proportions will increase, while the former one will decrease, over the foreseeable future. Among other factors driving this trend is the growing importance of information in American society. Increasingly rare is the person who stays in one profession for his or her entire career; much more common now is career-shifting. Even for people who continue in one occupation for several decades, life-long learning is imperative. To a degree my father would have found unimaginable, knowledge in virtually every field of study has exploded. The only way we can adapt to that frantic pace is to continue educating ourselves.

In a now-famous effort to understand how America treats older people, Patricia Moore, then 25, disguised herself as a woman of 85: she not only donned grey wigs, wore makeup to wrinkle her face and hands, and dressed in out-of-fashion garments, as one might imagine, but she also used devices that worsened her hearing and blurred her vision, while also using prosthetics to stiffen her arm and leg joints. Over a period of three years, she traveled to 116 cities in North America, spending untold hours talking with older people and living side-by-side with them. Among the results of this project are Moore inventions that are widely recognized today as exemplars of universal design: the "Good Grip" kitchen utensils (with big foam handles) and a pill bottle that resets its timer each time it is opened. She is now a design consultant in Phoenix, Arizona.

What are the lessons Moore and others have taught us? When we talk about universal design in education meeting diverse needs, what are the needs we are discussing and how many people have such needs? These are questions about demographics (the study of populations) and of prevalence (how many individuals have a particular condition or need). There is another term, "incidence," which refers to how many additional people develop a certain condition in any given year; that is helpful information but not of primary concern to us here.

Overall, we are talking about some 54 million Americans who have limitations of activity, of whom about 26 million have severe or profound limitations. (Unless otherwise noted, all numbers in this book refer to the United States of America.) The most common limitations in children and youth are specific learning disabilities, mental retardation, emotional disturbance, and attention deficits. The most frequent among college-age and other young adults are specific learning disabilities, attention deficits, and various levels of emotional disturbance or mental illness. Among adults in the middle-age years (25-54), the most-seen limitations are physical (mobility) conditions and health impairments. The most common limitations among persons over age 65 are physical (mobility) conditions, health impairments, and sensory limitations (including blindness and other loss of vision and deafness and other loss of hearing). The fastest-growing age group in America is that of people older than 85; of them, half need assistance with eating, dressing, shopping and other everyday tasks. When people, of whatever age, have severe or profound limitations of activity, regardless of type, we say they have "disabilities." We are also talking about individuals from ethnic/racial minority cultures. This includes some 31 million Americans who are persons of Hispanic origin; they comprise about 11% of the population and represent the single fastestgrowing ethnic minority group in the United States. According to the U.S. Bureau of the Census (which is the major source of the demographic data in this chapter), persons of Hispanic origin probably will become larger in number than African Americans some time early in this new century. In addition, we also are talking about African Americans (35 million, or 13% of the American population), Asian Americans and Pacific Islanders (11 million, or 4% of the population) and Native Americans (American Indians; 2.4 million, or 1% of the total). All numbers are estimates made by the Census Bureau in July 1999 (www.census.gov/population/estimates/nation/). A recent report from the U.S. Department of Labor (*Futurework: Trends and Challenges for Work in the 21st Century*, 1999) echoes these facts: over the next 50 years, minority groups taken as a whole will gradually increase in size until they comprise half of the U.S. population. Persons of Hispanic origin (who may be of any race) will constitute some 25% of all Americans by the year 2050. Many will be immigrants: the U.S. population is projected to grow 50% in those years, with two-thirds of the increase due to immigration.

Are members of ethnic and racial minority groups "nontraditional" in education? On the whole, yes, especially in higher education. The Futurework report from the U.S. Department of Labor reveals that just 62% of adolescents of Hispanic origin complete high school each year. While African Americans graduate from high school about as often as do whites, they are less likely to complete four years of college. These facts are troubling in today's "information economy," which places a premium upon high levels of education and training.

We are talking, as well, about people who have different learning styles. Some people learn best by listening to information, others by reading it, and yet others by participating in activities. Notably, some members of ethnic/racial minority groups tend to learn better in collaborative endeavors than in individualized ones. Finally, we are talking about people who find traditional education inconvenient for one reason or another: parents of young children, people who live far away from educational institutions, people who travel a great deal, etc. There are no reliable estimates of the numbers of such individuals.

The different statistics cannot simply be added, of course. Many older Americans also have limitations; some persons of Hispanic origin are also people with disabilities and some are over 65 years of age. Taking these overlaps into consideration, and remembering that we are not able at this time to quantify the number of people who have learning styles or preferences that do not mesh with traditional teaching techniques, we can estimate that about 60 million Americans of all ages, or some 22% of the nation's population, is in one way or another "diverse" as that term is used in this book. The point is a basic one: educators at all levels, from preschool through college to adult and continuing education, can expect to encounter sizeable numbers of individuals who have needs or preferences (or both) that make the traditional oral-lecture plus assigned-reading format of instruction problematic or difficult for them. Universal design in education tells educators to prepare, in advance, for these very different needs and, to the extent feasible, design and deliver instruction so as to meet those needs.