
This paper examines the curricula of a sample of American library and information science programs to determine the type and extent of instruction they offer in disability-related services and adaptive technology. The course catalogs and syllabi of nine library schools were examined for courses, lesson units, or required readings on adaptive technology or disability services. The results of the survey indicate that instruction in disability-related issues is not yet standard in library schools, despite the growing number of people with disabilities who use library services and increasing concern among practicing librarians about providing disability services.

Headings:

Library education -- Curricula -- United States.

Libraries and people with disabilities -- Teaching.

Libraries and adaptive technology -- Teaching.
INSTRUCTION IN DISABILITY SERVICES AND ADAPTIVE TECHNOLOGY IN SCHOOLS OF LIBRARY AND INFORMATION SCIENCE: A SURVEY OF THE CURRICULUM

by
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[Chapter 1] INTRODUCTION

Civil Rights for People with Disabilities

“People with disabilities are in your communities. Barriers and attitudes have kept them isolated and segregated for too long” — Mary Lou Breslin (Crispen 15).

The passage of the 1964 Civil Rights Act was a watershed event in American history, banning discrimination and segregation on the grounds of race, color, religion or national origin. However, there was one group of Americans excluded from the protection of the law: people with disabilities. The reason for this exclusion was the lack of recognition of discrimination based on disability as a legitimate civil rights issue. At the time, the attitude of American government and indeed of American society as a whole was that “if you have a disability, the burden of dealing with the consequences of disability rests on you the individual. There was no larger societal responsibility for dealing with the burden of those consequences” (Crispen 10). Many people with disabilities themselves believed this, and so did not feel right asking for accommodations which would have helped them. Mary Lou Breslin, co-founder of the Disability Rights Education and Defense Fund, tells how the bathroom at her high school was not wheelchair accessible, so she simply did not use it during the three years she was there (Crispen 11).

In the 1960s, people with disabilities emerged as a group whose civil rights—guaranteed to all American citizens in the Constitution—had long been denied by stigma,
discrimination and physical limitations. Along with this concept came the belief that the government has an obligation to assure those civil rights by enacting and enforcing appropriate legislation. Before the 1960s, assistance to people with disabilities was seen as charity extended toward people incapable of taking care of themselves.

The social history of people with disabilities in the United States is commonly divided into four time frames (Switzer 31). The first, from the colonial era to 1920, was a time when there were no state or federal government efforts to regulate how people with disabilities were treated and no formal efforts to assist them. In fact, some colonies persecuted people with disabilities: in 1729 Pennsylvania passed a law allowing people with physical disabilities to be deported. Care for those who were disabled was left to families and religious organizations, and abuse, neglect and social ostracism were common. In the 19th century, social reformers like Dorothea Dix campaigned for government care and protection for people with disabilities, especially children. It was during this time that the first American schools for children with disabilities were founded: the American School for the Deaf in Connecticut (which later became Gallaudet University in Washington, D.C.) and the Perkins School for the Blind in Boston. Most states enacted laws related to the treatment of people with disabilities during this time, but there was great variety among these laws and many were not enforced. States also founded institutions for the care and housing of people with disabilities in the belief that they would be sheltered from the cruelty of the outside world (Switzer 32-33).

The second time frame runs from 1920, when Congress passed the Smith-Fess Act, the first general federal law relating to people with disabilities, to the early 1960s, when the modern disability rights movement began with a small group of activists in
California. This was a complex and often contradictory period in terms of the rights of people with disabilities. The Smith-Fess Act benefited those who became disabled as adults by requiring states to establish vocational rehabilitation programs offering training, job placement and counseling services. It was inspired by earlier laws requiring such programs for veterans with disabilities (Scotch 20). During this time adults with less socially stigmatized disabilities made certain legal gains: for example, blind people won the right to bring their guide dogs into public places where other dogs are not allowed (Scotch 29).

This was also an era of widespread prejudice against people with disabilities, especially against those born with disabilities. Much of this prejudice was encouraged by the popular scientific ideas of the day. Eugenics, the idea of weeding ‘undesirable’ individuals out of a population, had many vocal supporters in the scientific and medical communities from the early 20th century until World War II. People with disabilities were one of the first groups targeted for extermination by the Third Reich: Physicians were given government permission to euthanize at will, and many people with disabilities were killed in hospitals, other institutions and concentration camps. In the United States, many states adopted forced sterilization programs for people with disabilities, a practice which went on in some areas until the 1970s (Switzer 38). Prejudice against people with disabilities was often tied to prejudice against other groups considered inferior in America such as non-whites, homosexuals, and non-Protestants (Switzer 36-37). Rhetoric against immigrants, African-Americans, Catholics, Jews and other groups who were frequently discriminated against often included invective against people with disabilities.
Not everyone in the scientific community supported eugenics, but many of those who did not were in favor of removing people with disabilities from the general population, for the supposed good of those with disabilities, of their families and of society at large. Thus the period from the 1920s to the early 1960s was an era of widespread institutionalization of people with disabilities, particularly those who were born with disabilities. The number of state-run institutions for housing people with disabilities skyrocketed as families were encouraged by the medical community to commit their children or other relatives with disabilities. During this time, it was legal in most states to commit individuals with disabilities against their will even if they had never done any harm to themselves or anyone else.

The enthusiasm for institutionalization was targeted toward people with learning, cognitive and psychiatric disabilities, but people with a wide variety of disabilities were institutionalized. Many people who were intelligent but had disabilities which made it difficult to communicate were committed. Even children with disabilities that weren’t severe were sometimes institutionalized because their families could not or would not take care of them at home or send them to a special school. Abuse of patients at these institutions, which were usually over-crowded (with five or six thousand patients in one facility), under-funded, poorly run and poorly supervised by the states, was rampant. Malnutrition, filthy conditions, isolation and lack of medical care as well as physical and sexual abuse were common (Switzer 38-39). There was usually no differentiation among patients and no specialized treatment for different conditions—everyone was housed in the same facilities and treated the same way, regardless of whether they were mentally ill,
retarded, deaf, paralyzed, or disabled in some other way. Dr. Wolf Wolfensberger, a long
time advocate for the de-institutionalization of people with disabilities, wrote:

> Whether young or old; whether borderline or profoundly retarded; whether
> physically handicapped or physically sound; whether deaf or blind…we took
> them all, by the thousands, 5000 to 6000 in some institutions. We had all the
> answers in one place, using the same facilities, the same personnel, the same
> attitudes, and largely the same treatment (qtd. in Lang 86).

American society began to turn away from institutionalization after a series of
high profile horror stories made news in the late 1950s and 1960s. A major event in this
story was the televising in 1972 of the ghastly treatment of mentally retarded children at
the Willowbrook State School in New York, which sparked a class action lawsuit against
the state and hundreds of protests. Similar situations in other states lead to a series of
judicial rulings that severely restricted the conditions under which people with disabilities
could be institutionalized against their will. More and more medical professionals and
disability advocates called for more community-based care and the use of
institutionalization only in certain circumstances. The de-institutionalization of people
with disabilities proceeded slowly through the 1960s and 1970s, but accelerated rapidly
in the 1980s as state governments rushed to cut spending to adjust to the fiscal policies of
the Reagan administration. Community-based programs were overwhelmed by the
number of people who needed support. Many people with disabilities who had never
lived outside of an institution—especially older people who had been institutionalized for
decades—could not care for themselves and became homeless. This situation illustrates
the need for direct action to integrate people with disabilities into the social and cultural
organizations of community life (Switzer 40).
The third time period, from about 1960 to 1975, is when the movement for civil rights for people with disabilities began to thrive. It was during this time that thinking about assistance to people with disabilities as charity began to shift to thinking about such assistance as a civil rights issue. There are several reasons for why the movement became powerful when it did.

— The movement for civil rights for African-Americans had introduced a new concept of peaceful protest and direct action agitation for legal and social change which inspired disability rights activists.

— Organizations which had been founded for the assistance of people with specific disabilities like the National Federation of the Blind and the National Association for Retarded Citizens began to work together, sharing resources and ideas, where they previously had not.

— There were more people with disabilities living and visible in American communities. Advances in medicine made it possible for more people who became disabled as adults to survive longer and in better health and many of these people refused to accept isolation and social stigma.

— In previous generations, Civil War and World War I veterans who became disabled during service agitated for legal protection and government assistance and received it. Vietnam veterans followed in this tradition and became a particularly noticeable and effective activist group.
— Advances in technology such as lighter, more maneuverable mobility aids and electronic communication devices made it easier for people with disabilities to travel and communicate, and hence to protest and organize.

— The shift away from institutionalization meant that more people who were born with disabilities lived within local communities, and the families and friends of children with disabilities often became involved in some form of activism.

— People with disabilities began to take a more active role in anti-discrimination efforts, founding and running groups and protests themselves instead of working within groups founded by people without disabilities.

A famous example of the last of these is Ed Roberts, a quadriplegic who successfully sued the University of California at Berkeley for admission in 1962, then designed and helped implement its first assistance program for students with disabilities (Switzer 75). He later founded the Berkeley Center for Independent Living, the country’s first association devoted to helping people with disabilities live fully integrated into their communities.

During the 1960s and 1970s, a new sense of people with disabilities as a minority group who faced discrimination—as a community—began to emerge. This new consciousness was slow in forming because people with disabilities overall do not have much in common: they are from all ages, races, classes, and any other social category one could name. There has also been a history of division among people with disabilities, as those who have less severe disabilities or those whose disability allows them to still
interact fairly easily with the non-disabled (which alleviates the stigma attached to their disability) sought to distance themselves from others.

A major event in the struggle for civil rights for people with disabilities was the passage of the Rehabilitation Act of 1973. This law was originally drafted as an extension of the Smith-Fess Act of 1920 with the intent to modernize American rehabilitation programs, but came to have a far greater legal impact than the 1920 law. Section 504 of the Rehabilitation Act was modeled on the Civil Rights Act of 1964. It called for affirmative action programs for people with disabilities in federal agencies and federal government contracts and also prohibited discrimination against qualified individuals with disabilities in any program or activity receiving federal funding (Foos 154). However, at the time there was no clear legal sense of what constituted discrimination against people with disabilities.

As an example, Mary Lou Breslin cites an early ruling in a lawsuit involving a wheelchair user who could not board a city bus. The judge in this case determined that there had been no discrimination based on disability because the driver had said that the person in the wheelchair was welcome on board the bus—the fact that the wheelchair user could not actually get on board without physical assistance was not considered the main issue. Another judge later came to a different conclusion: That the presence of steps leading onto the bus was a barrier for the wheelchair user and therefore the source of the discrimination, and that the local transit authority was responsible for removing that barrier (Crispen 12). The Rehabilitation Act and the many resulting lawsuits over its interpretation formed the basis for the Americans with Disabilities Act 17 years later.
The fourth time frame is generally accepted as running from 1976 to the present day. This was a period of serious legal and judicial consideration of disability rights as Americans with disabilities brought discrimination lawsuits against schools, government organizations, transportation companies, businesses and other public and private entities which denied them fair and equal treatment. Grassroots disability rights organizations were formed around the country to file and support individuals filing discrimination lawsuits and to engage in civil disobedience protests. ADAPT (Americans Disabled for Accessible Public Transit) was well known for picketing meetings of the American Public Transit Association and disrupting rush hour bus service in Denver and other cities. In the early 1980s, the disability rights movement suffered setbacks because of concern over the cost of implementing disability rights regulations. Mass transit companies strongly opposed being required to make their existing services accessible and were able to weaken federal regulations mandating that public transportation services be fully accessible, which was a major defeat for disability activists (Scotch 165).

However, such reversals inspired disability rights organizations to become better organized and work more closely together to gain political power. The efforts of such groups together with support from politicians who have disabilities (such as Bob Dole, former Senator from Kansas) or have relatives or friends who do lead to the watershed event of the disability rights movement: the 1990 passage of the Americans with Disabilities Act. While the Rehabilitation Act was important because it gave disability rights activists a broad legal basis on which to assert their rights in the courtroom, the Americans with Disabilities Act unequivocally codified those rights under the law.
Briefly stated, the Americans with Disabilities Act bans private employers from discriminating against people with disabilities, public entities from denying services or participation in programs or activities to people with disabilities, and private entities which provide services, programs or activities for the public from discriminating against people with disabilities (Foos xii-xiii). The Americans with Disabilities Act prohibits discrimination against people with disabilities in the private sector, which is enormously important in four areas that are critical for integrating people with disabilities into society: employment, education, housing, and transportation. Some might say that the Americans with Disabilities Act marks the beginning of a new, fifth time frame in the history of people with disabilities, one in which the long sought goal of independent, integrated life will become a reality for the millions of Americans with disabilities.

People with disabilities—physical, learning, cognitive, psychiatric or emotional—make up a significant portion of the American population. The U.S. Census Bureau estimates that, as of 2003, 45 million Americans between the ages of 16 and 64 have at least one permanent disability, and that 3.5 million children under age 15 have a disability. When people over age 64 are included, the total number of Americans with disabilities jumps to 77 million (U.S. Census Bureau: Disability Data 2003). (These numbers do not include individuals who are institutionalized.) There have always been many Americans with disabilities, but they were not as noticeable in the past as they are now because people with severe disabilities were frequently institutionalized and those with less severe disabilities tried not to draw attention to themselves as disabled. The number of people with disabilities in America will only increase in coming years as the ‘Baby Boomer’ generation ages. As medical technology advances, more people born
with disabilities or who become disabled as adults will survive longer as well, increasing the number of Americans who have disabilities.

**Access to Social and Cultural Institutions for People with Disabilities**

For many years, people with disabilities in America have been isolated from the larger communities in which they live. This segregation has prevented them from having access to the social, civil, and cultural institutions that form the basis for community life. In the mid-twentieth century, many people with disabilities were institutionalized, but even those who lived with their families or on their own were often severely restricted in their participation in community life—both by physical barriers and by cultural attitudes. The level of isolation varied depending on the attitude of the larger community: some communities consider people with disabilities pariahs and do not allow them any participation in community life, while others allow them to go certain places and do certain things which have been sanctioned by the non-disabled, and still others allow people with disabilities freedom to do what they want in theory but offer no assistance (Switzer 30).

Prior to the successes of the disability rights movement, the last situation—which social theorists who have studied people with disabilities in society call “laissez-faire”—was probably the best a person with a disability could find. The degree to which that person could participate in the laissez-faire community was determined by the extent of the disability. Social isolation from the organizations that shape the lives of non-disabled people often started with the development of a disability, and could be seen most starkly in cases where people were disabled from birth or early childhood.
Before Congress passed the Education of All Handicapped Children Act of 1975 requiring public schools to educate children with disabilities along with other children, most children with disabilities attended special schools (these were most commonly for children with physical or sensory disabilities who were obviously intelligent), were educated at home, or were institutionalized. Like other state disability related laws, laws regulating the education of children with disabilities were diverse and haphazardly enforced (Gibson 121). Educational institutions for children with disabilities were largely unregulated. While some were well run and committed to the education of their students, like the Perkins School for the Blind in Massachusetts, which Helen Keller attended, some were not. (It was not unheard of for families who sent their children to such schools, which were often boarding schools, to refuse to take them back, leaving the school responsible for the child’s welfare.)

The segregation of people with disabilities made it difficult for them to do many of the things that non-disabled people take for granted: going to school, working, voting (the law requiring that polling places be accessible was not passed until 1984), attending meetings of local government and civic organizations, attending community social events, shopping, participating in outdoor recreation, and enjoying the offerings of cultural institutions such as museums and libraries. This segregation also resulted in a lack of understanding and communication between disabled and non-disabled people.

Those without disabilities may fear or dislike those who have them, while people with disabilities may feel isolated and powerless and can come to doubt their own self-worth. Unlike racial or religious prejudice, one reason people may fear disability is that anyone could become disabled someday. Alternately, people with disabilities may be
treated with pity, and be subjected to patronizing behavior—like being patted on the head, spoken to in a baby voice, or having people forcefully step in to “help” them when they actually don’t need help. Jacqueline Switzer defines seven popular stereotypes of people with disabilities (41-42):

— The disabled person as pitiable and pathetic, the victim of a tragic fate.
— The disabled person as heartwarming and inspirational, courageous and heroic.
— The disabled person as sinister, evil and criminal (particularly people with psychiatric disabilities).
— The disabled person as better off dead.
— The disabled person as maladjusted and bitter, unable to make sound decisions or be reasonable.
— The disabled person as a burden, the responsibility of caring for whom is so great it destroys families and communities.
— The disabled person as unable to live a successful life, either professionally or personally.

Ruth Velleman describes another common misconception about people with disabilities called ‘spread.’ Spread is the idea that “if a person has one disability, he or she is totally incapacitated in all physical and mental areas” (Serving Physically Disabled People 5). Other stereotypes about people with disabilities are that they have a ‘childlike goodness’ and ‘exceptional empathy with others’ (Wright 6-7). These stereotypes flourish when
people with disabilities are not active participants in community life and do not interact with people without disabilities.

**Libraries and People with Disabilities**

“If handicapped people are not making use of libraries, it may be because they have not received in their past library experience the proper services to which they are entitled” — Merrilynn Gibson (123).

Libraries, institutions which exist to serve communities, are good candidates for efforts to encourage people with disabilities to participate in community organizations. A public library serves the people of a local municipality, an academic library serves those associated with a university, a corporate library serves those who are employed by the corporation, and so on. Today, most librarians hold community service as a professional ideal and would agree that a library is obligated to serve all the members of its community as best it can—including those members who have disabilities and who may have difficulty using the library’s resources. Unfortunately, in the past people with disabilities were excluded from most library services. There were exceptions to such exclusion: Some public libraries, particularly in urban areas, have traditionally offered outreach services to ‘shut-ins,’ people who have difficulty leaving their homes. This type of outreach service usually consists of librarians delivering books and other resources to isolated individuals. Such outreach is undoubtedly helpful to many people, but it is limited in scope and in effect.

Under the Rehabilitation Act, many libraries, as federally funded agencies, were legally required to provide a broader range of services in addition to accessible materials
and facilities for people with disabilities. Unfortunately in many cases nothing or very little was done to comply with the Rehabilitation Act. It was not until the passage of the much stronger Americans with Disabilities Act that libraries across the board began to take disability services issues seriously. The historical exclusion of people with disabilities from library service was partly based on the general lack of visibility of people with disabilities in community life (the ‘out of sight, out of mind’ principle). Before the advent of the disability rights movement, people with disabilities were expected to use special libraries administered by the Library of Congress’s Division of the Blind and Physically Handicapped or a library within a special facility for people with disabilities. Libraries for people with disabilities were few and far between and often limited in their resources. Prior to the 1970s, it is quite possible that a librarian at an average public, academic, school or special library would never see a person with a disability in the library, and so would not even think about providing disability services.

Another, more endemic reason for the exclusion of people with disabilities from library service is that people with disabilities were often not seen as needing the same kind of sophisticated information seeking and processing skills as people without disabilities need. Judith Davie draws a parallel between people with disabilities in state run vocational programs in the 1980s being taught insufficient and out-dated job skills and people with disabilities in libraries in the same period not being able to develop independent information literacy skills in her essay for Unequal Access to Information Resources (86). In both cases, there is an underlying expectation that people with disabilities do not need the full array of skills that non-disabled people do, because they will always be essentially dependent on others. The idea that adults with disabilities need
to be shielded from potentially offensive or disturbing material, like children, has also been a factor in limiting the types of material made available for them. (This is especially a problem for people who need materials in alternate formats such as Braille or audio recordings.)

Like other organizations that serve the public, libraries are now legally bound to serve their patrons who are disabled and such service is also seen as fulfilling the modern mission of the library as a service institution. Making libraries accessible means not only providing access to facilities and resources, both physical and electronic, but also supporting people with disabilities in developing their information literacy skills. The passage of the Americans with Disabilities Act led to libraries confronting issues of architectural and other physical barriers. In the late 1990s new laws were passed concerning barriers to electronic technology, an area which rapidly grew in availability and importance in that decade. The Rehabilitation Act was amended in 1998 to require that people with disabilities have access to electronic information systems which is comparable to access provided for people without disabilities (the amendment is commonly known as Section 508). Today, the debate in libraries about accessibility and reasonable accommodation is focused on providing equal electronic access as required by Section 508.

Definitions

Disability

The definition of disability under the Americans with Disabilities Act is broad, and intentionally so, in order to cover the wide array of potential causes and forms of
disability. Any person who has a physical or mental impairment that substantially limits one or more of that person’s major life activities, or who has a history or record of that kind of impairment, or who is regarded as having such an impairment is disabled under the law (Foos 140). (This definition is essentially the same as that in the Rehabilitation Act of 1973). Apparent or obvious disabilities are those that can be easily detected with casual observation of a person, while hidden disabilities are those that cannot, and the distinction between the two can be blurry.

Disabilities are often obvious because a person uses a visible support, mobility or communication aid like a wheelchair, cane, crutch, brace, prosthetic limb, hearing aid, or guide dog. Disabilities are also obvious in cases where they affect movement (such as walking) or speech in a noticeable way. Some disabilities can be obvious or hidden based on the behavior of the individual: amputees who conceal their prosthetic limbs would be considered to have a hidden disability, while amputees who do not conceal them or do not wear them would have an obvious disability. Learning, cognitive and psychiatric disabilities are often hidden, although some, like Down syndrome, have distinct physiological signs which can be observed casually. The difference between obvious and hidden disabilities is being able to tell easily and immediately whether a person has a disability upon meeting him or her.

*Adaptive Technology*

Adaptive technology is any device designed to provide alternative means of performing activities, using equipment or accessing materials for people with disabilities. Adaptive technology commonly refers to adaptive computer technology, but non-computer devices such as letterboards are also adaptive technology.
I have divided the literature related to the provision of disability services and the use of adaptive technology in libraries into three categories: the law, technological instruction, and guidelines for policy and procedures. In addition to library-related disability literature, I will review literature on the history of people with disabilities in the United States and on the practice of service learning in library and information science education.

**Library Accessibility and the Law**

Since the passage of the Americans with Disabilities Act in 1990, there has been much published on the issue of how libraries should comply with the law, especially considering the financial and staff shortcomings that many libraries face. *The Americans with Disabilities Act: Its Impact on Libraries* (1993), edited by Joanne L. Crispin, is a good guide to the history, legal, and intellectual underpinnings of disability rights legislation and disability service in libraries. The book is based on series of papers presented at a meeting of the American Library Association’s Americans with Disabilities Act Preconference Committee. Speakers at the meeting included disability rights advocates from groups like the World Institute on Disability and the Disability Rights Education and Defense Fund (who provided historical and social context for the
passage of the Americans with Disabilities Act), representatives from the U.S. Department of Justice and Department of Education (who discussed the mission and nature of the act) and librarians who have instituted and managed successful programs for patrons with disabilities (who described ways to make libraries and library services accessible).

Another useful resource for understanding how to interpret the law is Donald Foos and Nancy Pack’s *How Libraries Must Comply with the Americans with Disabilities Act* (1992), which is concerned with a practical application of the law. The authors have created a six step Americans with Disabilities Act planning model which includes:

1. Finding information about the Americans with Disabilities Act
2. Selection of an Americans with Disabilities Act coordinator for your library
3. Evaluation of how your library currently complies (or fails to comply)
4. Planning for accommodations and new services
5. Implementing changes
6. Periodic review of accommodations and new services

The book also includes advice on how to handle specific difficult situations such as working with staff members who are unaware of the need for Americans with Disabilities Act compliance or unwilling to make changes in the library.

For information about Section 508 of the Rehabilitation Act, consult the Center for IT (Information Technology) Accommodation’s website: Section508.gov (http://www.Section508.gov). (The Center for IT Accommodation is the branch of the U.S. General Services Administration which oversees policy issues related to Section 508.) The site includes clear and understandable explanations of each part of Section 508.
and how to receive information and training (brochures, workshops, conferences, and online tutorials on the site) regarding different kinds of adaptive technology issues. There are also links to appropriate government websites related to other recent disability rights laws, such as Section 255 of the Telecommunications Act of 1996, which requires manufacturers of telecommunications devices and providers of telecommunications services to provide accessible equipment and services to people with disabilities. (The Federal Communications Commission enforces the Telecommunications Act of 1996).

**History of Disability Rights Legislation**

Richard K. Scotch’s *From Good Will to Civil Rights: Transforming Federal Disability Policy* (2001) is a history of how Section 504 of the Rehabilitation Act was passed in 1974. Scotch summarizes the evolution of the legal rights of people with disabilities in the 20th century before the Rehabilitation Act, but he focuses on the process of writing the act itself and the federal government’s subsequent attempts to regulate its interpretation. He also discusses in depth the symbolism and rhetoric of the early disability rights movement and the changes in social attitudes toward disability during this time. Originally published in 1984, the book takes a pessimistic view of the future of the disability rights movement, a view colored by the failure of activists to stop many of the challenges to the Rehabilitation Act which were launched by transit lobbyists and local and state governments in the early 1980s. The second edition, published in 2001, includes an additional chapter which briefly covers the work of disability rights activists in the late 1980s and 1990s and the passage of the Americans with Disabilities Act. In light of the Americans with Disabilities Act, Scotch is more hopeful but still has
reservations about how much practical positive effect the law will have on the every day lives of people with disabilities.

The history of the fight for civil rights for people with disabilities is studied more broadly in Jacqueline Vaughn Switzer’s *Disabled Rights: American Disability Policy and the Fight for Equality* (2003). This book includes a great deal of social and cultural information about the lives and experiences of people with disabilities in American history. Switzer examines how stereotypes, misconceptions and misguided scientific theories have shaped American law and social custom relating to people with disabilities over the years. Within this framework, she discusses the origins and work of the disability rights movement, the history of rehabilitation programs, vocational programs and compensation for people with disabilities, the history of mass institutionalization of people with disabilities, and the process of drafting and passing the Americans with Disabilities Act. Modern controversial issues such as cochlear implants and the ‘right-to-die’ movement are also briefly considered. Switzer concludes the book with a “Status Report on Equality” which looks at statistics, polls and surveys gathered by the National Organization on Disability and other associations to see how Americans with disabilities are doing in key areas such as employment, social integration, housing and health care thirteen years after the passage of the Americans with Disabilities Act.

**People with Disabilities as a User Group**

*Unequal Access to Information Resources: Problems and Needs of the World’s Information Poor* edited by Jovian Lang (1988) is a special report on several groups of people who lack access to information resources: those living in the Third World,
children and young adults, and people with disabilities. The report contains a brief history of the treatment of people with disabilities in the U.S. from the 19th century on and an extensive analysis of the causes of information poverty among people with disabilities: lack of access, lack of different formats for materials, improper design of communication systems or facilities, staff attitudes, lack of coordination among those providing information services, and lack of adaptive technology. The report also considers the results of such information poverty: isolation from trends and events that shape society, and isolation from changes in the economy, transportation, communication, and technology. This isolation is particularly evident among older people with disabilities who spent part or most of their lives in state institutions.

Ruth A. Velleman is a (now retired) librarian who worked for many years in a school for children with disabilities. She wrote the first comprehensive book about library services for people with a variety of disabilities: *Serving Physically Disabled People: An Information Handbook for All Libraries* (1979) and an influential follow-up: *Meeting the Needs of People with Disabilities: A Guide for Librarians, Educators and Other Service Professionals* (1990). In both books, Velleman discusses in depth the stereotypes and prejudices people with disabilities face in society, provides a history of library disability and rehabilitation programs, and examines what progress has been made in improving such programs. She lists what she calls the “Big Ten” civil rights for people with disabilities:

1. A barrier-free environment
2. Appropriate housing and independent living
3. Transportation and travel
4. Financial assistance
5. Health care
6. Insurance
7. Appropriate social services
8. Work
9. Education
10. The rights of consumers with disabilities

Meeting the Needs of People with Disabilities (1990) covers a broader range of topics than Serving Physically Disabled People (1979), such as special education, the arts, and recreation. It is not just for librarians but other service professionals as well. It also includes short descriptions of many common disabilities such as epilepsy, arthritis, autism, spina bifida and Tourette Syndrome.

Another well-known early book focusing on library-related problems faced by people with disabilities is Library and Information Services for Handicapped Individuals (1989) by Kieth C. Wright and Judith F. Davie, which has gone through three editions. Wright and Davie cover many of the same topics as Ruth Velleman, but their book is in more of a textbook format with many charts, tables and graphs and a less personal writing style. They discuss common stereotypes and myths about people with disabilities in general (including the seldom mentioned ‘myth of total conversion’ in which able-bodied individuals over-identify with people with disabilities) and also misconceptions specific to certain groups of people with disabilities (such as the idea that blind people have extra-sensory powers). A special feature of the book is a list of “Principles of Library Programming and Services” for each disability group (people with vision impairments,
speech impairments, etc.) which is tailored to the group’s specific needs. The authors outline detailed staff development activities designed to provide librarians with experience in working with people with different disabilities.

**Policies and Procedures for Disability Services**

A great deal of the literature related to the issue of people with disabilities and library use is devoted to helping librarians and information professionals plan and implement services and use of facilities, and most of this literature is written by librarians themselves. Examples of the questions which literature in this area attempts to answer are: “How do I incorporate accessibility for people with disabilities in a building renovation?,” “How do I find out what technology my patrons with disabilities need to see electronic information?,” and “How do I conduct training in disability etiquette for my staff?” *Planning for Library Services to People with Disabilities* (2001) was specially commissioned by the ALA to guide librarians through the process of identifying barriers in their libraries, surveying patrons to discover special needs they have, and putting together a budget and a plan of action for removing barriers and meeting identified needs. *Preparing Staff to Serve Patrons with Disabilities* (1995) offers guidance for librarians working with people with disabilities by type of service or specialized group: reference, reader’s advisory, and senior citizens with disabilities, for example. Both are fairly short books focused on practical implementation of disability services rather than history or the law.

library’s physical environment, outreach services, and material selection, and how to develop appropriate solutions to these problems. The book also discusses adaptive technology (although this portion of the book is out-of-date now, it did examine the cutting edge technology of the time) and how libraries can help socialize children with disabilities. Many individual chapters are written by librarians, special education teachers, and other professionals with extensive experience working with people with disabilities, and some material was originally published in professional journals.

**Examples of Disability Services in Libraries**

Librarians have documented some of the programs and services for people with disabilities which they consider to be particularly effective and successful. Eunice Lovejoy is a long time librarian and disability rights advocate who chronicles exemplary programs at libraries—both special libraries for the disabled and mainstream libraries—that she has visited in *Portraits of Library Service to People with Disabilities* (1990). Lovejoy’s book examines in depth how these programs are managed—how many staff people are involved, the kinds of events and activities they stage, the resources they provide, how much money is spent and how the programs are funded, how many people participate in the programs and what sorts of disabilities they have, how the programs came to be set up and what the coordinators hope to do in the future. While Lovejoy does not formally discuss professional guidelines and standards, she does offer many examples of professional creativity, sensitivity and diligence in disability services.

There are also profiles of individual library services in article form, often written by librarians who work at the libraries in question, such as James Knox’s account of “The
University of Michigan Barrier Free Computer Users Group” (1993) and Bob Peasley’s “It Takes a Virtual Village to Empower All the Villagers” (2002) about the new accessible computer lab at the Public Library of Charlotte and Mecklenburg County. Common elements in these successful programs are staff members who are creative and dedicated to providing quality services for people with disabilities and, in turn, patrons with disabilities who are willing to communicate their needs.

Adaptive Technology in Libraries

Given the rapid pace of change in modern technology, the most up-to-date, trustworthy print sources for information about adaptive technology are periodical articles. The journal *Library Hi Tech* has been publishing articles on adaptive technology since the mid 1980s and is a valuable resource in this area. The major information science journals such as *Library Journal* and *American Libraries* also now regularly feature articles on adaptive technology. Since there are a wide variety of adaptive technology options, material covering the subject tends to focus on one specific technological issue, such as web design (“Leveling the Road Ahead: Guidelines for the Creation of WWW Pages Accessible to Blind and Visually Handicapped Users,” 1996) or how to make electronic resources accessible to people who are blind or have low vision (“Planning for Equal Intellectual Access for Blind and Low Vision Students,” 1993). There are also recent books about adaptive technology which are useful, such as *Adaptive Technology for the Internet* by Barbara Mates (2000), which explains how to train staff members to work with such technology in addition to introducing readers to ways to make technology accessible for people with a variety of disabilities. But
adaptive technology books, like all technology-related books, become out-of-date quickly.

Another good way to keep informed about adaptive technology is to read reviews and news disseminated by organizations which monitor new developments in it. Closing the Gap, which publishes an annual product review in print and provides information and evaluations of products on its website (http://www.closingthegap.com/index.lasso), is the best known group which covers general adaptive technology issues. There are other organizations which keep track of adaptive technology for specific disabilities, such as the American Foundation for the Blind, which publishes a technology journal called AccessWorld (http://www.afb.org/aw/main.asp).

**Library and Information Science Education**

Some of the literature I have reviewed is not explicitly related to people with disabilities, but contains ideas related to library and information science education in general that can be applied to disability service related instruction. Service learning has been fairly recently introduced in the library and information science curriculum, and this is a concept which can be used to enhance disability service education. “Service Learning in the Curriculum: Preparing LIS Students for the Next Millennium” by Nancy J. Becker (2000) and “Service Learning and LIS Education” by Elaine Yontz and Kathleen de la Peña McCook (2003) discuss the concept of service learning—education through active participation within a community setting—in depth. Becker discusses the historical roots of service learning in the United States and the theoretical framework
behind it, while Yontz and McCook provide real life examples of service learning programs, including one which specifically works with people with disabilities.

**Literature Overview**

Much of the literature related to library services for people with disabilities was written during three time periods: after the passage of the Rehabilitation Act (late 1970s/early 1980s), after the passage of the Americans with Disabilities Act (early-mid 1990s) and after the passage of Section 508 (late 1990s up to now). There has been a great deal written that is very useful and informative, however very little of the literature deals with the issue of how to educate librarians about disability services before they become professionals. This, however, is slowly starting to change, as the need for disability services becomes more integrated into the professional awareness of library and information science.
Previous Studies

The first survey of information science and library programs for instruction in disability services was conducted in 1976 by the staff of the Division for the Blind and Physically Handicapped of the Library of Congress. Merrilyn Gibson, a reference librarian for the Division, reported the results in her article “Preparing Librarians to Serve Handicapped Individuals” (1977). This study was conducted in response to a large volume of questions the Division began to receive after the passing of the Rehabilitation Act, asking where librarians could learn about providing services to people with disabilities. The results of this survey were not promising: 73% of responding library schools did not provide any instruction at all related to disability services, nor did they have present plans to implement such instruction. In 2004, Linda Lucas Walling published her updated survey of disability services instruction in library and information science programs, “Educating Students to Serve Information Seekers with Disabilities” in the Journal of Education for Library and Information Science. Walling was trying to discover whether or not library and information science schools are educating students about the “ADA, services for people with disabilities, abilities, and adaptive technologies” (Walling 1). She sent a six question survey to the directors of fifty-five accredited American and Canadian library schools and received responses from thirty-six (thirty schools in the U.S. and six in Canada). Of the responding schools, 100% of
the directors replied that their programs taught students about the Americans with Disabilities Act (or the equivalent Canadian legislation), 91% claimed that their programs had instruction concerning disability services, and 73% said their programs offered lessons in adaptive technology.

Questions and Methods

Walling acknowledges several limitations of her study; one striking limitation is that there is no information on the content of the disability-related instruction the schools offer. There is a list of titles of courses which the school directors identify as containing lessons on the Americans with Disabilities Act, disability services or adaptive technology, but there is no account of what sort of material the students read or discuss, whether there are exhibits of or hands-on instruction in adaptive technology, or even how much time is devoted to these issues. With these types of questions in mind, I decided to try to discover more about the disability related courses Ms. Walling asked about.

I did not want to repeat her method of asking the directors of the schools questions because, as Walling herself acknowledges, a school director might not actually know much about what is being taught in individual classes. I considered doing a survey of library school students to find out what they had learned about disability services in their courses, but realized that information collected this way would probably not be very reliable. Students may not understand which issues would be considered disability-related instruction or may not have paid attention to this aspect of the curriculum because they are not personally interested in it.
I finally settled on the idea of looking at publicly available information about library and information science courses. I examined their course descriptions, syllabi and required readings. I tried to discern whether or not individual instructors informed their students formally that disability services were available for them. This would indicate the instructor’s awareness of the disability policies of the institution and a general awareness of the needs of students with disabilities. Finally, I examined the quantity and kind of material available in the school libraries related to people with disabilities that would be available for interested students to do independent research.

Schools Surveyed

While it would be useful to survey the curricula of all fifty-five of the American Library Association accredited library schools, this was not possible due to constraints of time and scope. Instead, I selected a sample of nine accredited U.S. library and information science schools to include in the survey. I did not include Canadian schools because they are subject to different disability rights laws than the U.S. I limited my research to master’s programs, not looking at either undergraduate or doctoral courses, and to courses offered during the 2004-2005 academic year. (Most of the schools which reported offering disability-related courses in Walling’s survey claimed that these courses were offered at least once per school year.)

The schools studied here were chosen for a several reasons. I wanted to review curricula among diverse programs, varying in size, geographic location, make-up of surrounding community (urban, suburban, rural), academic focus (geared toward full
time or adult part time students), and whether they are private, public or religiously
affiliated. The schools whose curricula I reviewed follow:

Dominican University (River Forest, IL)
Graduate School of Library and Information Science
<http://www.dom.edu/gslis/index.asp?tschnav_id=1008>

Emporia State University (Emporia, KS)
School of Library and Information Management
<http://slim.emporia.edu/>

Indiana University (Bloomington)
School of Library and Information Science
<http://www.slis.indiana.edu/>

Louisiana State University (Baton Rouge)
School of Library and Information Science
<http://slis.lsu.edu/>

San Jose State University (California)
School of Library and Information Science
<http://witloof.sjsu.edu/>

State University of New York Albany
School of Information Science and Policy
<http://www.albany.edu/sisp/>

University of Kentucky (Lexington)
School of Library and Information Science
<http://www.uky.edu/CommInfoStudies/SLIS/welcome.htm>

University of Maryland at College Park
College of Information Studies
<http://www.clis.umd.edu/>

Wayne State University (Detroit)
Library and Information Science Program
<http://www.lisp.wayne.edu/>
Catalog Descriptions, Syllabi and Required Reading

I searched catalog course descriptions, syllabi, and information about required reading materials for words related to any area of disability services: disability, disabilities, adaptive technology, handicap(s), blind(ness), low vision, deaf(ness), hard-of-hearing, hearing impairment, wheelchair, accessibility, learning disability, dyslexia, dyscalculia, architectural barrier(s), Americans with Disabilities Act, Section 508, and others. I searched for information related to courses dealing with user interaction (for example, reference and circulation courses); web, database or other electronic system design; electronic user interfaces; children’s and young adult programming; school librarianship; management and administration; library planning and special user groups. I did not search in courses dealing with technical service operations such as cataloging and classification, acquisitions or serials, because these are not areas that would involve library users with disabilities directly.

Given the high percentage of school directors who gave positive answers to questions about disability law, services, and adaptive technology in their curriculum in Walling’s survey, I expected to find many more courses and individual lesson units concerning these subjects in the syllabi than I did. For the 2004-2005 school year, there
were three schools in the survey which offered disability-related instruction. These are the schools, the names of the courses, and the nature of the instruction provided:

**Dominican University**

Course Title: Planning and Equipping Libraries  
Course Content: ADA compliance in library planning

**Indiana University**

Course Title: Library automation  
Course Content: Making automated library systems accessible to people with disabilities

Course Title: Issues in the management of library services and programs  
Course Content: Planning and implementing programs for users with disabilities

**State University of New York Albany**

Course Title: Computing and Disability  
Course Content: Unavailable at time of survey—the course website was under construction

None of the descriptions of these courses included information about the readings required for them. All of the other schools surveyed offered at least one course during the school year which could have included disability services instruction (for example, Building the Human-Computer Interface at the University of Maryland, Information Policy and Technology Regulation at the University of Kentucky, and Reference and Information Services at San Jose State University) but there was no mention of any such instruction in the course descriptions.
Publicized Disability Services for Library and Information Science Students

There were two schools where the university’s policy on accommodating students with disabilities was publicized by the library schools, in both cases in the class syllabi: Emporia State and San Jose State. The other seven schools did not have any mention of the disability support services provided by the university (although all the universities have disability support centers, under various names), either in their catalogs, syllabi, or on their web pages.

Disability Related Materials Available in the Library

I searched the online library catalogs of all the schools surveyed to see what kind of materials they have available on disability services—except for the State University of New York at Albany, which does not allow people who are not affiliated with the university access to their catalog. All of the schools whose catalogs I searched had a good collection of materials on disability service issues available either in their libraries or in the main library collection of the university (not every library program had its own library). I specifically looked for books which I have included in my literature review or bibliography, other books by the authors in my literature review or bibliography, and books authored or published by reputable disability rights or service groups, the American Library Association, and state or federal government organizations. All of the schools whose catalogs I searched had at least one book by Ruth Velleman, and other commonly found authors were Kieth C. Wright, Judith Davie, Eunice Lovejoy, Courtney Deines-Jones, Rhea Joyce Rubin, Linda Lucas Walling, and Barbara Baskin and Karen Harris. All of these schools had recent books (less than five years old) on the Americans
with Disabilities Act and adaptive technology. All also had books specifically on
disability services in libraries, with at least one book on planning outreach and
programming and one on staff training and awareness in their collections. Other topics
found in the collections include: juvenile books about disability awareness, the portrayal
of people with disabilities in children’s literature, the history of the disability rights
movement, legal and ethical issues related to disability service, statistics related to people
with disabilities, collection development for disabled users, learning disabilities,
disability as part of cultural diversity, public policy, discrimination and advocacy, and
material on specific disabilities (blindness, deafness, etc.)

All of the schools (including SUNY Albany) have adaptive technology available
for use in their libraries, although not all of the adaptive equipment and services are
administered by the libraries. (At some schools, the disability services support center or
the computer center actually oversee the use of adaptive technology.)

Limitations of the Survey

The results of this survey are affected by the survey’s limitations. One obvious
limitation is the small size of the sample studied—nine library and information science
programs out of fifty-five located in the U.S. Another significant limitation is that only
curricula from the 2004-2005 school year were examined (any summer session classes
for 2004 were included). The results of the survey are interesting in light of this time
limitation, since three of the schools surveyed for this paper were among those identified
in the 1976 Library of Congress study as offering disability services instruction: the
University of Maryland, Emporia State University and Wayne State University.
In 1976, the University of Maryland offered a course called Library Services to the Disadvantaged which included people with disabilities, in addition to occasional workshops. The course offered at Emporia State University was called Library Service to the Disadvantaged; it included having students visit “appropriate” state agencies. Wayne State University had a course on “Library Service to Special Groups” which focused on senior citizens with disabilities and also conducted occasional workshops. None of these schools offered disability service instruction in the 2004-2005 academic year, although it is impossible to say without further research whether this was an anomaly or these schools have reduced their disability-related instruction since the 1970s. The courses named in Gibson’s study were not in the schools’ course catalogs at the time of the survey, nor were there any explicit mentions of disability related instruction in any courses that were in the catalogs. Emporia University had a course called “Information Transfer among Special Populations” which dealt with “attitudes, behaviors, perceptions and stereotypes related to individual special population groups” but these groups were not defined, and no reference to people with disabilities was made so I did not include it as a disability service related course.
[Chapter 5] OBJECTIVES FOR DISABILITY RELATED INSTRUCTION

As yet, there are no guidebooks specifically for designing library and information science curricula for teaching students about adaptive technology and disability services. There are guides for training working librarians and information professionals, most of which have been written by librarians based on their personal experiences working with people with disabilities. A significant amount of this material is in article form, and deals with specific cases of providing service, where a library had a user with needs for which staff were unprepared and had to come up with a solution (for example, Denise Forro’s account of how her library created a letterboard to communicate with a patron who had difficulty speaking and writing in “A Low Tech Approach”). However, there are also many books on the subject. These books tend to deal with either programming and services interaction (such as “Preparing Staff to Serve Patrons with Disabilities” by Courtney Deines-Jones and Connie Van Fleet), or how to make library technology accessible (such as Barbara Mates’ “Adaptive Technology and the Internet”) but not both. Another area of interest is how to formulate library policies related to disabilities which are fair and helpful to patrons, which abide by the law, and which take into account the library’s available resources. Most of the material in these guides are for professionals in the field but can be adapted for use within library and information science programs.
Objectives for Adaptive Technology Instruction

While the term ‘adaptive technology’ was not commonly used until the rise of microcomputer use in the 1980s, people have been inventing tools to assist people with disabilities for centuries. Over the years, many technological innovations that were originally intended for people with disabilities have come to be used by everyone, and some have had an enormous impact in society: the typewriter was created as a transcription tool for blind people, and both the telephone and the computer modem were invented by scientists working on communication devices for the deaf. Accommodations for people with disabilities that are architectural and not technological can also become useful for everyone. Curb cuts in sidewalks were controversial when they were first implemented in the 1960s to allow people in wheelchairs to move about more freely, but are now an accepted architectural feature in America. Curb cuts are not only used by people in wheelchairs, but also by people pushing strollers, delivering goods and packages, moving furniture and performing other activities (Crispen, 20).

Any library and information science course that deals primarily with designing or using technology can be enhanced by instruction in appropriate adaptive technology issues. The following are guidelines for incorporating adaptive technology into the general information technology curriculum.

User Needs

— Adaptive technology educators should teach students to be aware of the kinds of accessibility problems people with disabilities face. Examples:

1. People who are blind or have low vision may require screen magnification, high contrast color schemes, a screen reading program, a Braille monitor, Braille printers,
or an optical-character recognition scanner which can scan printed pages and convert the text to a computer file to be read onscreen.

2. People who have limited control in their hands require ‘alternate input devices’ such as large key keyboards (which can also benefit people with low vision), a large button mouse or mouse alternative such as a joystick, trackball or ‘no-hands mouse’ (which consists of two foot pedals), a keyboard with non-QWERTY key arrangement, or voice command software.

3. People who are deaf or hard-of-hearing require transcriptions of audio or video files and visible instead of audible cues and warnings.

4. People with learning disabilities may require screen reading programs, word processing programs which allow for color coding or other means of highlighting and categorizing text, or programs with a high degree of user interaction or lots of graphics.

— Adaptive technology educators should teach students how to verify that their designs (i.e., web pages and databases) and configurations (i.e., how computer stations are set up) are accessible. Web pages and databases can be tested with commonly used adaptive technology programs such as JAWS (a screen reading program designed for blind people), or Dragon NaturallySpeaking (voice command software which can be used with web pages, databases and other programs). Accessible computer stations should be tested by seeing whether there is room to sit in a wheelchair in front of the machine, whether people with limited arm movement can reach the keyboard and other input devices, and whether using the equipment requires straining, over-reaching or sitting in an uncomfortable posture.
Current Adaptive Technology

Technology changes constantly and quickly and adaptive technology is no exception, so it is essential that instructors be flexible and aware of new innovations.

Ways to stay up-to-date on adaptive technology are:

— Keeping in touch with the university’s disability support center or other disability support groups

— Subscribing to literature from groups which monitor adaptive technology such as Closing the Gap or the American Foundation for the Blind

Misconceptions about Adaptive Technology

Technology courses should also address several common misconceptions about adaptive technology.

— All adaptive technology is extremely expensive.

This is not the case. While certain specialty hardware items such as Braille monitors are very expensive, there are many quality software and hardware products which are reasonably priced. There are also an increasing number of shareware and freeware software programs available which have excellent features. Most states offer grants and other forms of financial assistance for the purchase of adaptive technology. Both Microsoft and Apple currently have basic adaptive features built into their computers: users can change font size, text and background color; change the sensitivity of keys or set up common key combinations (such as CONTROL-ALT-DELETE) to work as one key; control the mouse using the number pad keys; and make other changes, depending on which model of computer is being used (Mates 5-6).
—All people with a certain type of disability will be able to use the same product effectively.

In reality a product that works well for one person may not work for someone else with the same disability. A given piece of adaptive technology may not be suitable for a person’s needs. For example, patron with a visual impairment who needs to scan a few pages of a magazine and convert it into a text file to read will be able to easily use a scanner which scans one page at a time. However, a patron such as a university student who needs to scan large amounts of text will be much better served by a scanner which can process pages in batches. People with disabilities also simply have preferences like people without disabilities do: A person with limited use of his or her hands and arms could use voice command software, but may prefer to type with a large-key keyboard.

— Products with the same main function (such as screen reading) are interchangeable.

Products which seem similar at first glance can have small but crucial differences. For example, screen readers designed to help sighted people with learning disabilities interpret text will often skip over visual navigational controls (such as buttons and arrows) on a screen, while screen readers for the blind read these controls (‘back button’) out loud for users. It is important to know for whom a product was designed when evaluating adaptive technology.

—Accessible designs and interfaces cannot have graphics, images, elaborate formatting or audio or video.

In the early 1990s, when computer interfaces moved from text command line to graphical interfaces, this was largely true. However, adaptive technology programs have
become much more sophisticated and robust and can now handle many elements of web pages and databases which they previously could not, such as images, audio and video files, and elaborate formatting. However, programmers need to properly identify, tag and describe non-text elements so that adaptive technology programs can interpret them. For example: do not label a series of images as ‘Image 1,’ ‘Image 2,’ etc. because a screen reading program will identify them as ‘Image 1’ etc., which is not very informative (Mates 15-16).

— Adaptive technology is useless for people without disabilities.

This is also not true. People without disabilities adopt adaptive technology items which are useful to them as well. Closed-captioned television, for example, was invented for deaf people, but has come to be used in a variety of situations by hearing people (such as watching TV when someone else is asleep or studying in the same room). Alternate input devices such as trackballs are also frequently used by non-disabled people who find them easier to use than mice.

*Universal Design*

Universal design is a concept developed in the 1970s by the architect Ron Mace, who founded the School of Design at North Carolina State University and used a wheelchair. It is related to adaptive technology but based on a different idea: Where adaptive technology modifies objects to facilitate use by people who cannot use the current design, universal design seeks to create objects that can be used by anyone without further modifications (Switzer 190-191). Since the passage of the Americans with Disabilities Act, many architects have become interested in universal design as a way to create buildings that are both accessible and elegant. Recently, people who design
information technology systems have begun to employ universal design in their work as well, in order to comply with the requirements of Section 508 (Mates 4). As a topic of growing interest in information technology, universal design should be included in courses focused on the design of information systems.

**Objectives for Communication and Disability Etiquette Instruction**

Library and information science students who do not have experience interacting with people with disabilities may be intimidated by the prospect. Courses in specialized user groups, reference, reader’s advisory, circulation management, children’s and young adult services and any other course that focuses on librarian-patron interaction should have some instruction in etiquette and communication issues concerning people with disabilities. More and more people with disabilities are interacting socially and professionally with people who do not have disabilities. Some people with disabilities have difficulty communicating, which can lead to stress both for them and the people with whom they are trying to communicate. There are commonly accepted conventions of ‘disability etiquette’ which are designed to make interaction between people with disabilities and people without more effective and less awkward.

— Speak to the person with the disability, not to interpreters, assistants or other people who may be accompanying the person.

— Do not shout or speak in an exaggeratedly slow manner. If a person does not understand you, repeat yourself as clearly as possible. If this does not work, try writing or typing.
— Do not speak to adults with disabilities as though they were children. Do not commit condescending acts, like patting them on the head.

— If you cannot understand what a person is saying, be patient and ask for it to be repeated. Do not jump in and finish what is being said. Do not pretend to understand people—repeat what you think they have said, and ask if this is correct.

— Do not worry about using commonly accepted phrases like “You see what I mean?” with a visually impaired person, or “I have to be running along now” in conversation with a person using a wheelchair.

— Do avoid using negative terms like ‘crippled’, ‘afflicted with’, ‘suffers from’, ‘victim of’, or ‘confined to a wheelchair.’ Simple factual phrases like ‘uses a wheelchair’ or ‘has muscular dystrophy’ or ‘is deaf’ will do. Do not use offensive slang terms like ‘gimp’ or ‘retard.’

— When you ask questions about a person’s disability, be polite.

— If someone with a disability seems to need help, ask whether help is needed before stepping in to act.

— Do not move or touch a wheelchair, cane or other assistive device belonging to a person with a disability without asking for permission first. Such devices are their personal property. Do not distract, feed or play with assistance animals. Do not pet them unless you are told it is all right for you to do so.

— To get the attention of a person who is deaf or hard-of-hearing, you can tap his or her arm gently or wave.
— When first speaking to a person who is blind or severely visually impaired, identify yourself. If you need to guide or direct such a person, be specific about directions and distances and offer warnings about stairs, changes in the floor, or furniture.

— If a person with a disability needs involved one-on-one assistance, try scheduling an appointment with the person during a time when the library is not busy.

Library and information science students should also be aware of communication assistance devices such as letterboards and TTY (telephone typewriter) or TDD (telecommunication device for the deaf) telephones.

**Objectives for Library Policy Instruction**

The issue of writing and implementing disability policies should be part of library management and administration education. Any library, whether public, school, academic, corporate or special, should have a formal policy regulating the use of adaptive technology and the provision of services for people with disabilities. A disability services policy which is supported by staff training and awareness will help ensure that people with disabilities are treated fairly and equally; it will also help protect the library from unwarranted complaints. Policies will vary depending on the nature of the library and the community which it serves: for example, academic libraries which do not allow access by the general public do not have to provide disability services for members of the public with disabilities, only their own students, faculty, staff and others who have access to the collection. Many libraries, especially academic libraries, require people with disabilities to register for adaptive technology use and other services. This is particularly useful when working with people with hidden disabilities, because it keeps them from
having to explain repeatedly that they are disabled. It also helps keep adaptive technology equipment more secure because only authorized users are allowed to use it. (Vandalism is a common problem in many libraries, and adaptive technology equipment is not safe from it.) Libraries need to be prepared for a wide variety of situations that may occur, and train staff in what to do and say if:

— Adaptive technology equipment is temporarily unavailable
— A patron requires equipment or service the library does not currently provide
— The library cannot provide a requested accommodation

In order to make policies compliant with the law, those who draft them must be familiar with the Americans with Disabilities Act, Section 508, and other relevant federal and state legislation. The Americans with Disabilities Act continues to evolve today through court decisions, especially those that concern the definition of ‘reasonable accommodation’ for someone with a disability and ‘undue hardship’ for an organization. Disability advocacy groups such as the Disability Rights Education and Defense Fund and national civil rights organizations such as the Leadership Conference on Civil Rights keep track of disability related cases and lawsuits and offer guidance in how judicial decisions can be interpreted and applied in other situations. Groups that work with people with disabilities should be consulted when formulating a disability services policy.

Last but not least, librarians should develop a plan for publicizing disability services and the adaptive technology options that are available in a library. Librarians sometimes complain that no one uses services and equipment which are offered, but many times that is because people with disabilities in the community do not know about it. A successful publicity campaign should involve advertising both inside and outside
the library—on the library web site, in local independent living centers, consumer groups, senior citizen centers, churches, or other organizations that serve people with disabilities, and also in local advertising venues like newspapers and bulletin boards in stores and supermarkets.

**Service Learning and Disability Related Instruction**

Recently, the idea of service learning has become popular among library school administrators and educators. Service learning is defined as “a form of experiential education in which students engage in activities that address human and community needs together with structured opportunities intentionally designed to promote student learning and development. Reflection and reciprocity are key concepts of service learning” (Yontz 58). The idea of service learning is similar to the idea of the student internship, but it is evolving into something more involved than an internship. Reciprocity in service learning requires students working within a community to try to enrich the members of the community as well as themselves. Reflection requires students to regularly think about their experiences and what those experiences mean and to share those reflections with others, whether in writing or verbally. Service learning has been around for many years in American society: its roots are in the works of early 20th century philosophers William James and John Dewey, who emphasized the integration of theory with practice in education and of community service. It is the basis for service organizations like the Peace Corps and AmeriCorps (Yontz 59).

Communities of people with disabilities would be well served by service learning projects. Elaine Yontz discusses one disability related service learning project
undertaken in Clearwater, Florida, where a University of South Florida library student organized a Friends group for the Pinellas County Talking Book Library (one of the Talking Book Libraries managed by the Library of Congress’ National Library Service for the Blind and Physically Handicapped). The student gained a wealth of experience in organization, public relations and outreach, while the local community gained a new group to provide resources and assistance for people with disabilities. Service learning projects working with people with disabilities could be set up within any library setting—specialized libraries for people with disabilities, public libraries, academic libraries, etc.

Library and information science faculty should do more to publicize such options to students; by inviting people with disabilities or those who work with them to give presentations; by offering students opportunities to visit the campus disability services office or disabled student groups; and by visiting appropriate outside disability related agencies. Library school faculty should also find out what services local libraries offer for people with disabilities and what groups or individuals these libraries ask for recommendations.

The Future of Disability Related Instruction

As of this writing, library and information science programs are not doing enough to prepare their students to work with people with disabilities. The number of people with disabilities in the United States is currently 77 million, and growing as the population ages. More people with disabilities will appear in libraries in the future, as more of them become active and visible in American society as a whole. The United States has made a commitment to ensuring the civil rights of its disabled citizens through
the passage and enforcement of laws like the Americans with Disabilities Act and the Rehabilitation Act. Library and information professionals have made a commitment to community service that extends to all members of communities. Through encouraging service learning programs, introducing new courses in disability related issues, and making sure that these issues are part of instruction in appropriate existing courses, library and information science faculty can help future librarians be better prepared for the challenges ahead and play a role in helping to integrate Americans with disabilities more fully into the communities in which they live.
APPENDIX A

Federal Laws Relating to People with Disabilities

Architectural Barriers Act of 1968
Requires that all federal government buildings be accessible to people with disabilities.

Rehabilitation Act of 1973
Bans discrimination against people with disabilities by any program or agency which receives federal funding. Requires affirmative action programs for people with disabilities in federal agencies and federal government contracts.

Education for All Handicapped Children Act of 1975
Requires integration of children with disabilities in public schools and appropriate programs for children with disabilities enrolled in public schools.

Developmental Disabilities Act of 1975
Grants states federal money for following set procedures for care and treatment programs for people with long-term disabilities which occur before age 22.

Voting Accessibility Act of 1984
Requires all registration and polling facilities to be accessible to people with disabilities.

Air Carriers Access Act of 1986
Bans discrimination against people with disabilities by airlines.

Fair Housing Amendments Act of 1989
Bans discrimination against people with disabilities in sale or rental of housing.

Americans with Disabilities Act of 1990
Bans discrimination against people with disabilities by employers. Requires access for people with disabilities in places of public accommodation and business which are built or renovated after 1993, all state and local government facilities, and all means of transportation available to the public.

Section 255 of the Telecommunications Act of 1996
Requires manufacturers of telecommunications equipment and providers of telecommunication services to make equipment and services accessible to people with disabilities when possible.

Amendment to Section 508 of the Rehabilitation Act of 1973 (1998)
Requires federal and federally funded agencies to provide accessible electronic and information technology to people with disabilities. Requires access to electronic information for people with disabilities that is comparable to access for non-disabled people.
Assistive Technology Act of 1998
Provides federal funding for state programs which provide assistive technology for people with disabilities.
APPENDIX B
Selections from the Americans with Disabilities Act

For the full text of the Americans with Disabilities Act, see the U.S. Department of Justice website at http://www.usdoj.gov/crt/ada/statute.html.

Purpose of Act

(1) some 43,000,000 Americans have one or more physical or mental disabilities, and this number is increasing as the population as a whole is growing older;

(2) historically, society has tended to isolate and segregate individuals with disabilities, and, despite some improvements, such forms of discrimination against individuals with disabilities continue to be a serious and pervasive social problem;

(3) discrimination against individuals with disabilities persists in such critical areas as employment, housing, public accommodations, education, transportation, communication, recreation, institutionalization, health services, voting, and access to public services;

(4) unlike individuals who have experienced discrimination on the basis of race, color, sex, national origin, religion, or age, individuals who have experienced discrimination on the basis of disability have often had no legal recourse to redress such discrimination;

(5) individuals with disabilities continually encounter various forms of discrimination, including outright intentional exclusion, the discriminatory effects of architectural, transportation, and communication barriers, overprotective rules and policies, failure to make modifications to existing facilities and practices, exclusionary qualification standards and criteria, segregation, and relegation to lesser services, programs, activities, benefits, jobs, or other opportunities;

(6) census data, national polls, and other studies have documented that people with disabilities, as a group, occupy an inferior status in our society, and are severely disadvantaged socially, vocationally, economically, and educationally;

(7) individuals with disabilities are a discrete and insular minority who have been faced with restrictions and limitations, subjected to a history of purposeful unequal treatment, and relegated to a position of political powerlessness in our society, based on characteristics that are beyond the control of such individuals and resulting from stereotypic assumptions not truly indicative of the individual ability of such individuals to participate in, and contribute to, society;

(8) the Nations proper goals regarding individuals with disabilities are to assure equality of opportunity, full participation, independent living, and economic self-sufficiency for such individuals; and
the continuing existence of unfair and unnecessary discrimination and prejudice
denies people with disabilities the opportunity to compete on an equal basis and to pursue
those opportunities for which our free society is justifiably famous, and costs the United
States billions of dollars in unnecessary expenses resulting from dependency and
nonproductivity.

Purpose. It is the purpose of this Act

(1) to provide a clear and comprehensive national mandate for the elimination of
discrimination against individuals with disabilities;

(2) to provide clear, strong, consistent, enforceable standards addressing discrimination
against individuals with disabilities;

(3) to ensure that the Federal Government plays a central role in enforcing the standards
established in this Act on behalf of individuals with disabilities; and

(4) to invoke the sweep of congressional authority, including the power to enforce the
fourteenth amendment and to regulate commerce, in order to address the major areas of
discrimination faced day- to- day by people with disabilities.

Definition of Disability

Disability. The term disability means, with respect to an individual

(A) a physical or mental impairment that substantially limits one or more of the major life
activities of such individual;

(B) a record of such an impairment; or

(C) being regarded as having such an impairment.

Title I Employment

General Rule. No covered entity shall discriminate against a qualified individual with a
disability because of the disability of such individual in regard to job application
procedures, the hiring, advancement, or discharge of employees, employee compensation,
job training, and other terms, conditions, and privileges of employment.

Reasonable Accommodation

The term reasonable accommodation may include

(A) making existing facilities used by employees readily accessible to and usable by
individuals with disabilities; and
(B) job restructuring, part-time or modified work schedules, reassignment to a vacant position, acquisition or modification of equipment or devices, appropriate adjustment or modifications of examinations, training materials or policies, the provision of qualified readers or interpreters, and other similar accommodations for individuals with disabilities.

**Undue Hardship**

(A) In general. The term undue hardship means an action requiring significant difficulty or expense, when considered in light of the factors set forth in subparagraph (B).

(B) Factors to be considered. In determining whether an accommodation would impose an undue hardship on a covered entity, factors to be considered include

(i) the nature and cost of the accommodation needed under this Act;

(ii) the overall financial resources of the facility or facilities involved in the provision of the reasonable accommodation; the number of persons employed at such facility; the effect on expenses and resources, or the impact otherwise of such accommodation upon the operation of the facility;

(iii) the overall financial resources of the covered entity; the overall size of the business of a covered entity with respect to the number of its employees; the number, type, and location of its facilities; and

(iv) the type of operation or operations of the covered entity, including the composition, structure, and functions of the workforce of such entity; the geographic separateness, administrative, or fiscal relationship of the facility or facilities in question to the covered entity.

**Title II Public Services**

Subject to the provisions of this title, no qualified individual with a disability shall, by reason of such disability, be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity.

**Title III Public Accommodations and Services Operated by Private Entities**

General Rule. No individual shall be discriminated against on the basis of disability in the full and equal enjoyment of the goods, services, facilities, privileges, advantages, or accommodations of any place of public accommodation by any person who owns, leases (or leases to), or operates a place of public accommodation.
Exemptions

The provisions of this title shall not apply to private clubs or establishments exempted from coverage under title II of the Civil Rights Act of 1964 (42 U.S.C. 2000- a(e)) or to religious organizations or entities controlled by religious organizations, including places of worship.
BIBLIOGRAPHY


