

## **A. ABOUT DISABILITY AND INTEGRATION**

The editors wish to thank the Bay Area Outreach Program (BORP) for permission to include this edited selection from *We Can do It: A Training Manual for Integrating Disabled People into Recreation Programs*.

### **A.1 Mainstreaming/Integration (Fitzgerald, 1982)**

*Mainstreaming* is sometimes used as another word for *integration*. Even though the two terms have been used interchangeably they mean different things. Mainstreaming connotes the placing of a few "different" people (a disabled, racial, or sexual minority) into a regular program or activity, thereby implying that the other "regular" people have more power or authority. Integration implies that both groups have equal status and are moving toward a common point of reference. Even though mainstream is more commonly used in education and government circles, a word with more positive connotations can help affect more positive change.

Integration is a dynamic process with the individual progressing through a continuum of various stages from the segregated experience at one end to the totally integrated experience at the other. Not all people with disabilities are ready to be integrated; some need support services which can prepare them for the next stage on the continuum. Progression through these various stages permits people with and without disabilities to have increasingly greater opportunities for social interaction at a pace that is appropriate for each individual.

#### **A.1.1 Integrated Recreation**

Not many years ago, everyday activities such as school, employment, and recreation were unavailable to people with disabilities. They had separate schools, sheltered workshops, and segregated recreational facilities. In fact, many people with disabilities were institutionalized and kept out of sight from the able-bodied community. During the early 1970's, Wolf Wolfensberger introduced a concept called "normalization"—introducing people with disabilities to a more "normal" environment. This represented a change from the prevailing attitudes towards people with disabilities.

Although normalization applies to all aspects of one's life, when applied to recreation, it created a new strategy for recreators with disabilities. In addition, change was brought about by federal and state legislation mandating that a continuum of services be given in the "Least Restrictive Environment" to children with disabilities.



Budget cuts in community and social services played an important factor too. Many community agencies had to pool their resources in order to stay open. When organizations which had provided recreation to people with disabilities were cut back or closed, city and university recreation programs were asked to provide services. It was found that offering integrated recreation activities in existing programs was very cost effective. All of these factors led to the development of integrated recreation.

## A.2 Legislative History

There have been a great number of Federal laws which have implications for recreational opportunities for people with disabilities. The most recent and far-reaching has been the Americans With Disabilities Act. Following are brief descriptions of major landmarks in the legislative history of accessibility rights in the United States:

- a. **Vocational Rehabilitation Act of 1963.** Funds for training and research in recreation for the ill and handicapped were included in the 1963 revision of the Vocational Rehabilitation Act of 1954. This was the first Federal action recognizing the importance of recreation services for people with disabilities. Following this action, several colleges and universities received funds to implement training programs at the graduate level in "recreation for handicapped individuals," providing a foundation for the growth and development of therapeutic recreation.
- b. **The Architectural Barriers Act of 1968 (Public Law 90-480).** This was the first federal law requiring facility access for the physically disabled, stating that "any building or facility constructed in whole or in part by federal funds must be made accessible and usable by the physically handicapped." The impact of the Architectural Barriers Act, although fairly limited in its scope (affecting only federally funded construction or remodeling), has been profound. It provided the legislative mandate for development of accessibility standards and the legal foundation for future accessibility efforts.
- c. **The Uniform Federal Accessibility Standards (Federal Standard 795).** The Uniform Federal Accessibility Standards (UFAS) define the standards for design, construction and alteration of buildings to meet the requirements of the Architectural Barriers Act. UFAS is based on the Minimum Guidelines and Requirements for Accessible Design (MGRAD), which were developed by the Architectural and Transportation Barriers Compliance Board to provide direction to federal agencies that oversee federally owned, leased, or financed buildings. UFAS is the title of the standards actually adopted by those agencies. Recreational and civic

buildings and sites that require public access, or that might serve as a place of employment for a person with disabilities, are among the facilities addressed in these standards. UFAS does not address program accessibility issues (except as they relate to physical access).

- d. **Rehabilitation Act of 1973 (Public Law 93-112).** This document is a comprehensive revision of the 1963 Vocational Rehabilitation Act, removing emphasis from "vocational" rehabilitation and focusing on total rehabilitation of all disabled persons. Several features of this legislation that impact recreation include:
  - 1) **Title II - Research and Training.** This title continues authorization of funds for training of recreation professionals to work with disabled persons and research in this area.
  - 2) **Title III. Section 304 - Special Projects and Demonstrations.** This section authorized grants for "Operating programs (including renovation and construction of facilities, where appropriate) to demonstrate methods of making recreational activities fully accessible to handicapped individuals."
  - 3) **Title V. Section 504 - Rehabilitation Act of 1973 (Public Law 93-112 as amended by PL-516 and PL 95-602).** "No otherwise qualified handicapped individual in the United States . . . shall, solely by reason of handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance."
 

While the Architectural Barriers Act demands *physical access* in programs and facilities, Section 504 requires barrier-free *programming* for physically disabled persons. Barrier-free programming includes making the program available in alternative locations when the site itself cannot be made accessible. It also addresses access to programs related to people with sensory impairments.
- e. **Rehabilitation Act Amendment of 1974 (Public Law 93-516).** This legislation authorized the planning and implementation of the White House Conference on Handicapped Individuals which was held in May 1977. Recreation was one of sixteen major areas of concerns addressed. Recommendations for increased Federal funding, better accessibility in parks, monuments and recreation programs, more consumer involvement in planning, program implementation and employment evolved from conference sessions.



Generally, older people perceive almost 20 percent less keenly than those with normal vision. Colors often blend together and closely related textures cannot be discerned.

Glare is a major problem for many people, particularly older people. Do not confuse the term "glare" with "light level." Low light levels cast heavy shadows, making it difficult for many people with low vision to perceive hazards such as stairs, changes in floor surface, etc. Glare usually results when too much light bounces off light colored walls and floors, making it difficult and uncomfortable to navigate a long corridor or around a room.

Many children with sight disabilities have been overprotected by parents, friends, and teachers; as a result, they may not have had the opportunity to explore their environment during early childhood. These children need to explore as much of their environment as possible to build concepts that their peers acquire through sight.

Children who are blind or have severe sight disabilities may lack skills in body control, balance, coordination, and physical abilities. Poor posture is another characteristic of many people with severe sight disabilities. They may develop faulty carriage because of the inability to orient their posture to their surroundings. They have a tendency to lean forward with their arms outstretched to avoid hitting objects. Some blind children are very tense, walking rigidly with their heads tilted backward.

Early detection of blindness or sight disability is essential for treatment and education of children. The main objectives of treatment are to restore or improve sight and to prevent further deterioration of vision.

Education of children with visual disabilities may take place in a mainstream setting, a special classroom, or a special school. With a totally blind child, auditory instruction and reading by touch using the braille system are emphasized. Children with partial vision may attend regular school, providing the teacher is trained to meet their special needs. Parents also receive training to better meet the needs of their child with a visual disability.

As adults, the greatest emphasis in rehabilitation is independent mobility training (skills in moving about and in coping with environmental factors). Following World War II, the Veteran's Administration began to train blinded veterans in the use of the white cane system. This system developed after observing that for various reasons many blind people could not, or did not wish to, adjust their lives to using guide dogs.

It is important to note that many blind adults do not read Braille. In fact, less than 10 percent of the people who are blind or who have severe visual disabilities are able to

read Braille. Many adults choose to get written information transcribed onto audio cassettes and listen to the material.

### A.3.2 Hearing Disabilities

People with hearing disabilities are unable to respond normally to sound in most social situations. There are two main classifications of hearing disabilities, each with subdivisions.

#### a. Hard of Hearing:

- 1) Mild. People with a mild hearing loss learn speech by ear and are able to function almost normally in group and individual conversations. These people may have difficulty discerning singular and plural forms of words and in hearing subtle tone changes.
- 2) Marginal. People with marginal hearing disabilities usually have difficulty understanding speech from a distance of more than a few feet and in following group conversation.
- 3) Moderate. People with moderate hearing disabilities have enough hearing to learn language and speech with amplification of sound through a hearing aid when the auditory sense is aided by visual information.

#### b. Deaf:

- 1) Severe. People with severe hearing disabilities have trainable residual hearing with amplification of sound through one or two hearing aids. Their language and speech do not develop spontaneously so they must learn communication through specialized techniques.
- 2) Profound. People with profound hearing disabilities cannot learn to understand language and speech by ear alone, even with amplification of sound. Sign language or lip reading is usually needed for communication.

The time at which hearing loss occurs in a person's life has a profound affect on the development of communication and social skills. Congenital disabilities (disabilities present at birth) are often caused by certain contagious diseases such as rubella, mumps and influenza during the mother's pregnancy. Acquired hearing disabilities may develop any time during one's life after certain childhood diseases, injuries, ear infections, etc.



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### A.3.3 Developmental Disabilities

In people described as developmentally disabled, learning ability develops slower than average. Reasoning and judgement capabilities may also develop at a slower pace. For most people with developmental disabilities, it is not the ability to learn that is missing, but the speed and ease with which things are learned that is lessened.

The range of capabilities in people with developmental disabilities is probably greater than in any other disability group. It is also the group about which the general public has the most apprehension and misconceptions.

People with developmental disabilities are often overprotected and discouraged from exploring the world or interacting with others. Often, they are limited to programs that are designed "especially for their needs," and allowed to socialize only with "their own kind." After finishing a specialized education program as a child or young adult, many may spend their adult years in inactivity.

Fortunately, the practice of institutionalizing people with developmental disabilities is changing. With more appropriate training and education, many people learn to become independent citizens, managing their own homes or apartments and money. Many are able to obtain and hold a non-skilled or semi-skilled job.

Many people with developmental disabilities have problems with coordination, balance, agility, strength, body awareness, and self image. These problems are often the result of inactivity and lack of opportunity to participate in group activities.

People with mild to moderate developmental disabilities will usually not behave very differently from their peers. They may be interested in things that we perceive to be more appropriate for younger people and some social skills may be below their expected age level.

While the learning skills of a person with developmental disabilities may be more concrete, more repetitive, and perhaps less focused than many of their peers, their emotional life, sense of humor, and sensitivity to others may be more sophisticated than expected.

### A.3.4 Emotional Disabilities

There are many situations or behaviors that may lead us to label someone as having an emotional disability. These behaviors may develop as part of an individual's "coping strategy" to survive in their environment. People with emotional disabilities have

adapted methods to interact with their surroundings with a "fight for survival approach."

Someone may simply have a lifestyle and needs that are different from the prevailing "norm." Others may have a variety of behavior problems and may act them out, may become aggressive and perhaps harmful to themselves and/or others. Still others may be people whose lives are filled with extreme fears, withdrawal, depression, anxiety, and stresses. Some people have developed problems as a result of alcohol and drug abuse.

Conditions that may be labeled as autistic, schizophrenic, psychotic, and other severe disabilities may appear to give people a "lack of contact with the real world," and an inability to relate to others. These people may have severe language disabilities, a strong need for predictability in their daily lives and repetitive behaviors.

Sometimes the greatest barriers in working with a group that has been labeled as having an emotional disability are the fears and expectations other people have about their behavior. These fears and expectations may affect the approach and design of programs. Knowing the cause or definition behind a label does not improve our services or skills. What is important to remember is that people with emotional disabilities are just like any other group.

### A.3.5 Epilepsy

Epilepsy means seizure, but not all convulsive seizures are due to epilepsy. Seizures are classified by variations in severity, duration, frequency, and warning of impending attacks.

- a. **Grand Mal.** This is easily recognized by rigidity, loss of consciousness, and falling. Biting of the tongue may occur from strong contraction of the jaw muscles. Jerking, twisting, involuntary cries, and complete amnesia are also characteristic of this type of seizure. The seizure itself may only last a few minutes, but the deep sleep that follows may last several hours. Upon waking from a grand mal seizure, the person may experience weakness, mental dullness, or headaches.
- b. **Petite Mal.** This is a short lapse of unconsciousness followed by immediate recovery. The eyes blink or roll and fix upon some object, and fine muscular twitchings may be unnoticed except by the epileptic.
- c. **Psychomotor Attack.** This condition is characterized by sudden strange behavior in which there is consciousness without apparent recall. The person experiencing this type of rare attack may go out of the room without reason, may have a



sudden temper tantrum, or appear to act out a bad dream. During the seizure the person is apt to be injurious to others. Most often these types of attacks are associated with psychosis.

An epileptic person may participate in activities designed for the general population provided the person is supervised by a leader who is considerate of the person's special needs and trained to effectively meet those needs. An epileptic's seizure threshold seems to be lower when experiencing emotional upsets, bodily discomfort, or low blood sugar due to hunger. Many studies indicate, however, that lying around and constantly resting seem to spark emotional upsets. An epileptic should get a reasonable amount of physical and mental activity. It has been shown that seizures rarely occur when the person is alert and active.

### A.3.6 Mobility Disabilities

The following descriptions list conditions that may affect an individual's mobility and independence within the environment.

- a. **People Who Use Wheelchairs for Mobility.** Wheelchairs allow people with many disabling conditions to have mobility that they might otherwise not have, or would find greatly reduced. Congenital disabilities, accidents, and illness can all leave parts of our bodies in different stages of weakness, paralysis, or absence. Paralysis may not only affect motor control of certain parts of our body, but may also affect responses to external stimuli, such as touch, temperature, pain, and sometimes even awareness of body position.

Some environmental concerns of people who use wheelchairs include obvious things such as ramped entrances and elevators instead of stairs, adequate parking in convenient areas, level walks with firm surfaces, and wide aisles in stores and classrooms. Not only are accessible toilet facilities a must, but so is the availability of drinking water. Due to immobility, it is imperative that large amounts of water be consumed.

Many people with upper and lower limb impairments, or with reduced stamina, use electrically powered wheelchairs for mobility. Uneven surfaces, such as cobblestones, can cause a moving chair to jolt and the fine control required to operate an electrical wheelchair may become erratic or even stop. Uneven surfaces can also aggravate extreme pain in some people.

Many people with mobility disabilities also have faulty internal thermostats and are unable to adjust their body temperature needs to meet external demands. In hot weather they may not be able to perspire freely, and thus may suffer heat stroke at a relatively low temperature. In some conditions pain and/or muscle and joint flexibility may be affected by cold and dampness. Thus, people with mobility limitations need opportunities to escape from uncomfortable climatic conditions, which may become life threatening for some.

- b. **People Who Have Difficulty in Walking.** People who have difficulty in walking may (or may not) walk with aids such as crutches, a cane, a walker, braces, artificial limbs, or even holding onto a friend's arm. Reduced agility, speed of movement, difficulty in balance, reduced endurance, or even a combination of these may contribute to impaired mobility. Energy reserves are often used faster than average. A person who walks with difficulty may be required to spend their energy in trying to keep their balance or otherwise meet challenges of the environment as it confronts their disability.

Some environmental elements of concern to people with walking difficulties include uneven walking surfaces, walks interrupted with raised or uneven expansion joints, slippery surfaces such as highly polished floors or wet shower rooms, walks filled with debris, areas that collect standing water, sand and/or ice, etc.

People who wear leg braces or artificial limbs may find stairs with square nosings a great hazard. Their toe may get caught by the nosing, making it difficult to pass from one level to the next and possibly causing them to fall.

Handrails on both sides of stairs and ramps are particularly helpful to people with walking difficulty. Handrails are needed on both sides, as someone may be stronger on one side over the other, and not everyone is "right-handed." Often people who may be using a wheelchair will use handrails along the ramp as an assist up the incline.

Heavy doors are often a problem for everyone, but people who use crutches, canes, or walkers may have another problem. The door may close too quickly and trap the crutch or tip below the bottom of the door.

- c. **People With Upper Limb Impairments.** While we do not normally think of someone with "two good legs" having a mobility problem, the environment requires extensive and complex upper body manipulative skills and strength for people to function independently.



Environmental concerns of people with upper limb disabilities include styles of knobs, buttons, and handles to operate doors, drinking fountains, coin operated vending machines, telephones, elevator controls, the weight of exterior doors, etc.

People with upper limb disabilities may also have some difficulty with balance, especially when climbing stairs or walking up inclines. Handrails along both sides of the risers will be helpful in providing support when the individual leans against them.

- d. **People With Less Than Average Agility, Stamina, and Slower Reaction Time.** Many people have multiple health problems which may include cardiovascular and cardiopulmonary diseases, hypertension, and degenerative conditions of aging. Pregnant women and young children may also have difficulty with limited agility, stamina, and slower than average reaction times.

There are many environmental elements that require people to make quick decisions and/or to be strong and agile. Such elements include revolving doors, escalators, street crossings, boarding buses and street cars, etc. Not only do elderly people have difficulty with these facilities, but most children are also impeded.

### A.3.7 Some Common Physical Disabilities

- a. **Cerebral Palsy.** Cerebral palsy is a neurological disorder resulting from damage to the brain before, during, or after birth. Control of the muscles is lost or impaired, ranging in degree from mild to severe. Four general groups of cerebral palsy are spastic, athetoid, ataxic, and rigid. Persons with cerebral palsy (CP) may fall into more than one of these categories.
- b. **Spinal Cord Injuries.** Spinal cord injuries are generally caused by trauma rather than congenitally. Diving and motorcycle accidents are the most frequent causes of trauma, followed by auto accidents and falls.

Depending on the level of injury, a person is either a quadraplegic (quad meaning four) where all limbs are impaired or paralyzed, or a paraplegic (para meaning two) where both legs are affected. When the cord is damaged or severed, sensory and motor nerves are not able to send impulses below the level of the injury. Some of the nerves that are damaged relate to loss of bladder and bowel control.

- c. **Poliomyelitis.** This is a disease which affects motor cells in the spinal cord, which in turn destroys the nerve impulses in certain muscles. Residual effects of polio are varied. If nerves are not completely destroyed there will usually be a certain amount of recovery. Some persons will have mild effects of the disease while others can become quadraplegics.
- d. **Stroke.** This is destruction of brain substance resulting from a rupture of a cerebral blood vessel, an occlusion of a cerebral blood vessel or vascular insufficiency. Hemiplegia, speech disturbance and perceptual disorders are specific symptoms. These vary depending on the severity and area of brain injury.
- e. **Multiple Sclerosis.** This is a slowly progressive disease of the central nervous system characterized by partial paralysis involving one or more limbs, visual disturbances, or heaviness of the limbs. It is primarily a disease of young adults.
- f. **Arthritis.** Joints of the body are inflamed and may become enlarged and painful to move, causing a loss of range of motion and mobility.
- g. **Spina Bifida.** A congenital malformation of the spinal column in which some portion of the vertebra fails to form over the spinal cord (thus leaving it exposed). This can be corrected with surgery. Spinal cord involvement may occur producing varying degrees of neurological impairment affecting strength and movement of the legs as well as bowel and bladder control.
- h. **Muscular Dystrophy.** Muscular dystrophy is a chronic, progressive disease of the muscles manifested by the gradual weakening of the voluntary muscles. Muscular dystrophy (MD) itself is not fatal. However, eventually all of the voluntary muscles become involved and are unable to perform their functions in respiration and circulation.

### A.3.8 Amputees

Individuals who have lost a limb(s) or part of a limb are included in this group. A large number of amputations are a result of automobile, machinery, or explosion accidents. Certain diseases like diabetes also cause many amputations. Some terms used to describe the location of the amputation are:

- Unilateral - one arm or leg
- Bilateral - two arms or legs
- Double - one arm and one leg
- Multiple - more than two limbs

A person who loses an arm or leg experiences not only physical loss but psychological damage as well, as is true of most people with physical disabilities. The person must rearrange thinking and place added value on those things that previously may have been of little concern or value.

### **A.3.9 Disfigurement**

Disfigurement can result from a number of causes, including birth defects, burns, and accidental injury. An important factor to remember is that the degree of disfigurement does not indicate the degree of difficulty that an individual may have in adapting to his or her disability. Often an individual with a "minor" disfigurement has a more difficult adjustment than an individual whose disability appears more severe.