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ABSTRACT

The role of three professional groups--adaptive physical educators, therapeutic recreation specialists, and special educators--in planning individualized leisure programs for disabled persons is discussed. Characteristics of such programs should take into consideration principles of normalization and least restrictive environment. A systems approach is advocated that uses objective based programing and assessment. Selection and adaptation of activities should then be based on inclusion of both active and sedentary involvement, taking into account individual needs and characteristics, and providing varying degrees of individual and group participation. (CL)

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## INDIVIDUALIZED LEISURE PROGRAMS FOR DISABLED INDIVIDUALS

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Helen Keller said it eloquently--"It is not enough to give the handicapped life; they must be given lives worth living." Opportunities to participate actively in leisure and recreational activities provide such quality to the lives of individuals with handicapping conditions, regardless of types or severities of their conditions. To be meaningful such opportunities must be individualized and personalized according to interests, needs, abilities, and disabilities of each participant. Teamwork and transdisciplinary efforts among Lanny E. Morreau and Janet E. Cross (both Department of Specialized Educational Development) and Carl B. Eichstaedt (Department of Health, Physical Education, Recreation, and Dance)-- all from Illinois State University, Normal, Illinois-- have provided this valuable and significant Practical Pointer. Practical and functional approaches in Individualizing Leisure Programs for Disabled Individuals will result in increased numbers of individuals with handicapping conditions having more high quality opportunities which stimulate happier, richer, more productive, and fun-filled lives. Individually and collectively for their professional and personal contributions, thanks and well done are extended to this Illinois State University team.

The premise that participation in meaningful recreation and leisure activities is desirable for everyone has led educational and recreational agencies to strive for optimum use of services and facilities by their constituents. While a large portion of society is extensively involved in a variety of leisure programs, communities are now challenged to meet recreational and leisure-time needs of severely disabled persons, individuals whose needs have often been ignored in the past. Although new programs are being developed to integrate disabled children and adults into the mainstream of everyday life, a pressing need exists for effective development and articulation of services by recreation specialists, physical educators, and special educators. Too often, these professionals operate independently, thus, duplicating services and often overlooking client needs. As a consequence disabled individuals are frequently denied comprehensive, effective programs for development and community participation.

Leisure programs are particularly important for disabled persons in that many are unable to occupy available time constructively with meaningful activities. In fact, disabled citizens may find unscheduled time a curse rather than a pleasure; sedentary activities in the home--television viewing--might consume the majority of leisure hours. Consider, for example, the number of individuals leaving institutional environments who have limited skills for participation, a restricted repertoire of leisure activities, and no knowledge of community recreational alternatives. Simply creating community-based residences will not meet needs of these individuals; they must be prepared to experience community living successfully. Many institutionalized mentally retarded individuals have been returned to institutions not because of difficulty adjusting to employment situations as one might speculate, but, rather, because of inability to handle leisure-time. (McGriff, 1970)

In addition, as a result of Public Law 94-142--The Education for All Handicapped Children Act--thousands of disabled learners are being mainstreamed into programs with normal students where, without specialized skill development, they will be unable to participate. Similarly, professionals must consider disabled learners for whom the least restrictive environment is the self-contained program where access to benefits of modelling normal peers in leisure activities is unavailable. Each year, thousands of disabled learners are graduated from public education programs where leisure activities and motor development may not have been part of instructional programs. Clearly, coordinated programs must be developed in institutions, schools, and communities if these populations are to receive specialized preparation needed for participation in normal life activities. Only through teaching of leisure skills--those truly learned and replicated for pleasure's sake--can strides toward normalization be made.

While need for developing leisure and recreation programs is receiving increased attention, few published reports describe programs aimed at training individuals in associated skill areas. (Wehman, 1977) Frequently, expansion of services to meet needs of disabled individuals is hampered by problems in program planning (Corcoran & French, 1977; Pomeroy, 1974); leisure-planning is often accompanied by a relatively poor delivery of service.

Geddes (1974) identified several possible explanations for inadequate programming for disabled individuals--lack of staff, time, facilities and knowledge. In support of this contention, Nessbitt and Hippolitus (1977) indicated that recreation and park service providers, ". . . in general, do not fully understand or accept their responsibility to provide routinely for the needs of

handicapped people in everyday programming." (p. 12) Specifically, therapeutic recreation specialists and educators may not be skilled in determining...

- ...skills disabled individuals bring to programs;
- ...where, along the continuum of recreational and developmental skills, an individual should begin new experiences; and
- ...specialized, individually prescribed recreational and leisure-time program needed for each individual.

Where these skills exist, specialists may be limited by absence of workable methods and instruments by which to determine type of programs needed by severely disabled individuals in community-based recreational environments, and by which to assess levels of social skills needed to foster normalized participation and peer interaction. Leisure-skill development may be of little value if an individual's behavior remains socially unacceptable.

Although a defense of present conditions could be based on limited available resources, individual advocacy groups are demanding equal rights and opportunities for all handicapped children and adults, emphasizing need for normalized opportunities and procedures. (Information and Research Utilization Center in Physical Education and Recreation for the Handicapped, 1974) Therefore, the issue confronting local recreational and educational specialists is not if they should provide programs for disabled persons, but what types of programs will be most productive, beneficial, and economically sound. A model is needed by which interrelated professionals can create and articulate motor development and recreational programs for disabled individuals. Such a model must assure not only that skills are acquired, but that individuals can apply them in situations where direct supervision and guidance will be absent. As noted by Beck and Shaw (1960), "The most pertinent criterion in most human learning is . . . not performance in the learning situation but subsequent performance . . . the occurrence of appropriate behavior in different stimulus contexts." (p. 544) Planning individualized programs which result in a high level of continued independent participation in community activities require--

- Definition of interrelated professional roles.
- Design of normalized instructional programs.
- Selection of instructional environments which match individual needs and characteristics.
- Preparation of measurable objectives in all developmental areas.
- Development of objective-based assessment procedures.
- Selection of leisure activities which match individual objectives and characteristics.

### Professional Roles

Three professional groups are most directly involved in leisure program development for disabled individuals--adaptive physical educators, therapeutic recreation specialists, and special educators. While each of these groups is responsible for a relatively distinct developmental area, each can provide direct support to the other professionals by considering their objectives when planning activities.

### Adapted Physical Education

Adapted physical education consists of a diversified program of developmental activities suited to interests and skills of students with impairments, disabilities, or handicaps who may not safely, successfully, or with personal satisfaction engage in unrestricted activities included in general physical education programs.

Unfortunately, adapted physical education has been most frequently associated with specialized programs for persons having high incidence handicapping conditions. Adapted physical education should not be limited to students with postural, orthopedic or organic conditions, but should be made available to students with visual and hearing impairments, intellectual limitations, behavioral problems, perceptual-motor difficulties, and non-sensory physical disabilities. In addition to students with chronic conditions, adapted programs should provide for individuals recuperating from injuries and accidents and for those convalescing from long or short-term illnesses. Generally, every student capable of attending school, regardless of type or severity of impairment or disability, can take part in and benefit from participation in adapted physical education programs. (IRUC, Adapted Physical Education Guidelines, 1976)

The role of the adapted physical educator encompasses several specific functions--

- Corrective--remediating conditions such as postural deficiencies and minor orthopedic deviations through individually planned exercise and activity programs.
- Developmental--increasing exercise tolerance of weak and ill persons through individually planned and progressively rigorous programs; more recently this has included preventing or improving low levels of motor ability or poor physical fitness in preschool and primary level children.
- Therapeutic--providing individual prescriptions of movement activity to meet specific needs.
- Remedial--changing or improving function or structure by means of selected exercises and physical/motor activities.
- Adaptive--modifying sports and games to enable impaired, disabled, and handicapped persons to participate, or providing means for each person to develop sufficient skills in various activities so as to be able to participate with classmates and peers.



Special Physical Education--providing for specific needs and abilities of special populations through corrective, developmental, therapeutic, remedial, or adapted activities. (IRUC, Professional Preparation in Adapted Physical Education, Therapeutic Recreation and Corrective Therapy, 1976, p. 33)

### Therapeutic Recreation

Peterson (1976) defined therapeutic recreation as input--patient and agency resources; transformation process--engagement in provisions or recreation service on the part of the special population member; and output--change of behavior positive recreative behavior. From a service delivery perspective Kraus (1978), in turn, described therapeutic recreation as "... a form of professional service that provides recreational and related activities specially designed to meet the needs of individuals suffering from some significant degree of illness or disability. It seeks to help these participants help themselves through a process of referral, counseling, instruction, or actual program development. It may be provided in an institutional setting where its primary purpose is to contribute to the process of overall recovery and to facilitate successful return to the community. It may also be a continuing service intended to enrich the quality of the lives of those with permanent disability in institutional or community settings by providing important psychological, physical, and social benefits." (p. 4)

In terms of roles, then, the therapeutic recreation specialist provides--

- Assessment--determining the client's present status and need for recreational experiences or other forms of growth or service that may be provided by recreation.
- Goal-Setting--identification of specific recreational goals for the individual client.
- Planning--selection of appropriate activities or experiences to meet goals.
- Service Delivery--implementation of prescribed programs.
- Evaluation--on-going monitoring of participation and assessment of the program's effectiveness. (Kraus, 1978, p. 58)

### Special Education Personnel

Potential for involving special educators in motor development and recreational programming is frequently overlooked and, consequently, underused. The classroom teacher, for example, often has more extensive access to a given individual than do specialists in motor and leisure-skill development. Yet, professional interaction does not systematically occur. While requirements of individualized educational programs (IEPs) may facilitate a coordinated approach to reaching developmental goals, the planning process may stop short if each professional writes distinct, but unrelated, objectives for individual development. While obvious relationships

exist between roles of the therapeutic recreation specialist and the adapted physical educator--particularly with children and young adults between ages of three and twenty-one--no perceived relationships may exist between goals of these professionals and the special educator.

The special educator is in the unique position of collaborating on fine muscle development through classroom activities; providing practice on motor development and leisure skills in the classroom and, less formally, through outside activities; and assuring life applications through teaching toward such objectives as selecting leisure activities, locating activities in the community, and transporting oneself to different areas of the community. Preferences for available leisure activities cannot, for example, be developed in the absence of exposure to activities which, in turn, require the individual be introduced to locations and procedures for gaining access to them.

Through cooperative programming between physical/recreational specialists and special education personnel, specific skills or cognitive components of selected activities can be introduced and practiced in the respective settings. This reduces time required for acquiring skills and facilitating maximum learning opportunities. The therapeutic recreational specialist, for example, may be responsible for implementing the objective--.

Given a checker board and checkers, the learner will move one piece within fifteen seconds each time his turn occurs.

For a multiply disabled individual to master this objective, several behaviors must first be learned. The classroom teacher can reinforce learning of prerequisite skills by providing the learner opportunities to take turns, emphasizing directional awareness and responding verbally within a preset time frame.

The coordinated efforts of the three professional groups can assure--

- Objective-based assessment to determine existing levels of psychomotor development, physical fitness, and social skills.
- Individually prescribed programs for motor, leisure skill, and social development.
- Skills required for gaining access to available leisure programs in the community.
- Repeated applications--practice--in simulated and life settings.
- Progressive evaluation to determine individual strengths and successes.

#### Program Characteristics

Attempting to predetermine characteristics of a population is extremely risky and, often, counter-productive. Beneath any given label ascribed to a group--i.e., mentally retarded--lies a vast number of individuals having unique skills and needs. Labels represent a group of individuals who are often homogeneous only in limited areas, while being heterogeneous across many more.

Consequently, we cannot assume that existing programs designed for individuals with a specific disabling condition will suffice; multiply disabled individuals have unique and distinct characteristics. The Information and Research Utilization Center in Physical Education and Recreation for the Handicapped (1975), for example, noted that "... extreme individual differences are seen among these participants. As level of retardation is lowered, more severe secondary physical impairments accompany social-emotion problems." (p. 103) Intelligent integration, along with diverse recreational alternatives are needed to promote entrance and continued participation of disabled individuals in the mainstream of society.

Along with being individual-responsive, programs should be normalized.

Normalization means making available to disabled persons, patterns and conditions of everyday life which are as close as possible to the norms and patterns of the mainstream of society. (Nirje, 1969) While life routines, including recreational outings and participating in community and social activities are symbolic of the procedure (Burnette, 1974), the principle embodies specific corollaries which should characterize programs for disabled individuals. Normalization implies--

- A normal rhythm of the day--Does the disabled individual receive adapted physical education equivalent to that of normal peers?
- A normal routine of life--Are leisure activities provided in a variety of locations?
- A normal rhythm of the year--Are leisure skills taught appropriate to seasonal opportunities?
- Opportunities for normal developmental experiences--Does the individual have the opportunity to interact with adults as well as persons his/her own age?
- Having personal choices considered--Is the individual allowed to select leisure skills for development?
- Living in a bisexual world--Do leisure activities promote mixing with males and females?
- Having economic choices--Does the individual pay (in some form) for recreational events him/herself?
- Freedom from deliberate aversive control--Is physical punishment avoided when teaching skills?

Incorporating these characteristics into planning-decisions and creating suitable environments for individual development represent the initial steps in program implementation.



### Environmental Characteristics

The program designed for disabled individuals should represent the least restrictive alternative. As mandated in The Education For All Handicapped Children Act of 1975 (Public Law 94-142), "... to the maximum extent appropriate, handicapped children, including children in public or private institutions or other care facilities, should be . . . educated with children who are not handicapped . . . Section 612(5)(B)." Professionals are faced with the quandry of providing mainstreamed recreational and developmental programs for individuals who are often unable to participate due to lack of skills, whose behavior patterns may lead to rejection, and whose needs call for more extensive personalized attention than is available in the community.

Selecting an appropriate developmental environment should be based on needs and characteristics of each client. Professionals must be able to determine which client characteristics call for a self-contained program and which characteristics promote success in a community-based setting. Further, any model for integration into community programs must incorporate provisions for individual progress from direct supervision--dependent--to less directed programs--independent.

As noted by Morreau (1978), two variables other than physical characteristics have significant effects on the success of disabled individuals in community-based programs--(1) developmental status of the learner, and (2) incidence of maladaptive behaviors. Learners who have not acquired basic self-care and social skills and learners who emit high levels of unacceptable behavior may be liabilities to self improvement as well as to the success of the program itself. In both cases, demand on staff time may be so extensive as to reduce developmental opportunities of other learners. Maladaptive behaviors and personal characteristics may reinforce negative stereotypes of disabled individuals held by members of the community and may be incompatible with learner participation in developmental experiences.

A variety of environmental alternatives are needed to accommodate needs and characteristics of individual learners. The Community Education Project of the Minneapolis Public Schools defined a continuum of programs progressing from dependent to partially independent settings to independent community programs (Morreau, 1978)--

Dependent environment was defined as a self-contained leisure-skill development program away from continuous daily community contact, but incorporating intermittent community interaction for selected skill development and modelling potential. Disabled individuals in this program could be characterized as having minimal developmental skills and/or extreme behavior problems.

Partially independent environment included leisure skill development and participation at a community site, without consistent involvement in existing community programs. The program included ongoing, but not continuous, contacts for skill development and modelling potential. Disabled individuals in this program had mastered a set of primary developmental behaviors necessary for community participation and exhibited minimal disruptive behavior--none critical to success in a community program.

Independent program involved continuous participation with normal peers in community programs through integration into ongoing recreation programs. To be placed in available programs without direct professional support required that the individual demonstrate mastery of all designated developmental skills and show no consistent or extreme behavior problems.

Precise criteria must be established for determining initial placement of an individual and the point at which this individual is adequately skilled for transition to a more independent program. An individual who does not meet criteria specified for a given program can be placed at the preceding level and advanced to a more independent program after criteria are met. For example, mastery of the following objectives might be considered as essential for successful transition from a self-contained to a partially independent program--

Given a runny nose or saliva on the face, the learner will wipe it off when prompted to do so (developmental).

Given a structured activity setting, the learner will participate with few instances of--

- hanging on to staff.
- rocking.
- tasting inedible objects.
- snorting (maladaptive).

Given a structured activity setting, the learner will participate without--

- unwanted kissing.
- undressing him/herself.
- open masturbation.
- running from the activity area (critical maladaptive).

Similarly, transition to existing programs in the community requires increased levels of independence across developmental objectives--wiping the nose or mouth without prompts and less or no instances of the described maladaptive behaviors. Through development of alternative programs progressing toward independence with precise criteria for placement, skill development can be partially assured. However, equally important as the environment in which learning occurs are procedures by which it is facilitated.

### Objective-Based Programming

Individualized programming requires effective instructional systems. A systems approach should be viewed as a process which--

- Incorporates a number of instructional programs or activities designed to meet individual needs.
- Directs selection of activities.
- Informs us when clients have been successful.
- Tells us when failure occurs, suggests why it occurred, and directs us toward remediation.

These outcomes can only be derived through developing precise goals and objectives. Programs should be focused on an overall goal--what it is that will be attained by the participant via the program. In the case of a disabled person, a goal might be, "To provide the individual with skills, knowledges, and attitudes to participate meaningfully and consistently in available community-based leisure activities." Such a goal statement, in turn, provides a basis for developing behavioral objectives which respond to the question, "What should the individual be working toward?" (Morreau, 1974) Objectives for multiply disabled individuals must consider development in motor, leisure-skill, access skill, and social skill areas. Each objective should be written to include (1) conditions under which the behavior will occur, (2) exact behavior the learner will emit, and (3) precise criteria by which the learner's success will be evaluated.

For example, the following behavior objectives directed toward the program goal might be established for a disabled client--

Motor: Given a square box which is four inches or less from side to side and less than one pound in weight, the learner will grasp it with one hand and lift it three feet, five successive times without dropping it.

Leisure: Given a paddle, net and ping-pong ball, the learner will serve the ball, clearing the net and hitting the opposite side of the table on four of five attempts.

Access: Given the address of a bowling alley, the learner will diagram the shortest route to follow in walking to the location.

Social: Given an informal dance situation, the learner will dance with an individual of the opposite sex without making inappropriate sexual advances.

Rather than writing objectives on a day-to-day basis, which may leave gaps in individual programs, a sequence of objectives can be written across each domain--motor, leisure--to accommodate potential developmental needs of all program participants. A developmentally sequenced set of objectives enables the professional to conduct an individualized assessment on which to base program prescription.

#### Objective-Based Assessment

What may appear to be a time-consuming task can ultimately provide tremendous time savings while assuring improved programs for disabled individuals. Comprehensive behavioral objectives represent an efficient and effective assessment instrument. Further, because program prescriptions must be individualized, objective-based instruments reduce need for standardized measures which are often limited to comparative descriptions of individual performances.

Structurally, each objective is a test item. Conditions describe circumstances under which evaluation will occur; behavior defines exact response an individual will emit; and criteria establish mastery-level performance--point at which the learner should be advanced to the next objective in the skill-development sequence.

For example, in the area of biological functions an individual may need to develop increased endurance. Consequently, such an individual might be evaluated on objectives similar to the following--

Given a jump rope, the learner will jump the rope without stopping for twelve consecutive minutes. (Tucker, 1979)

Testing on this objective presumes the professional has already determined that the individual has prerequisite skills in the areas of coordination, balance, and flexibility.

Objectives in a sequence might also call for demonstrated competence in combining basic biological functions into larger motor units. For example, an individual who had demonstrated adequate performances in coordination, flexibility, strength, and reaction time might be evaluated to determine skills on objectives related to catching an object--

Given a twelve inch softball thrown underhand from a distance of five feet, the learner will catch the ball with his hands four of five times.

Finally, where an individual who had demonstrated competency on skills including catching, bouncing, throwing, and shooting a ball, might be assessed to determine competency in applying them to game situations--

Given a basketball, the learner will dribble the ball the complete length of the court without turning it over in the hand or losing control over it.

By arranging a set of objectives on a recording sheet in the order in which behaviors would develop--proceeding from the simple to the complex--each individual can be pre-assessed across a common set of objectives. Failure in performance on a given objective indicates where an individual's program should begin.

It is also possible to evaluate multiple-levels of performance on a given objective. For example, on the previous objective related to endurance, an individual may not be able to perform at the established criterion level of twelve minutes. However, from a planning perspective, it would be necessary to know how well this individual performed before increased exercises were provided. The objective could be stated with three levels of performance--four minutes, eight minutes, and twelve minutes. A check mark to indicate initial performance then serves as a baseline by which to evaluate individual participant progress.

By assessing each individual through an objective sequence, the professional can determine what skills every participant is prepared to work toward; what skills each individual most needs to acquire; and size, difficulty and characteristics of tasks to be prescribed. In addition, pre-assessment provides a reference against which individual progress and, consequently, program effectiveness can be judged. Finally, results of individual participant assessment provide information needed for activity development or selection. Effective planning and individual program development require that professionals discontinue the practice of selecting activities which have no relationship to individual objectives. Instead, activities should be selected to meet objectives established for each individual participant.

### Activity Selection and Adaptation

Program development for disabled individuals requires not only that activities be selected to meet participant objectives, but that they be tailored to match needs and characteristics of each individual; identifying individual differences is a critical factor in prescriptive programming. Each learner possesses unique characteristics in the areas of physical ability, cognitive functioning, and social and emotional development. For multiply disabled individuals opportunities for optimum learning have often been inhibited due to effects of physical limitations, presence of neurological involvement hindering normal sequential development of motor skills, and lack of opportunities for social interactions. Each of these potential disabilities must be considered in selecting activities. Prescriptive properties of a curriculum emerge as criteria for activity selection are matched with the present status and characteristics of individual learners.

### Characteristics of Leisure/Recreational Activities

Inherent to any skill or activity are basic components upon which each is built--balance, strength, coordination, endurance. In addition, specific activities require use of particular extremities or body parts. Basic components of a selected activity must match a learner's physical abilities if the learner is to experience immediate success, a prerequisite to motivation for progressive motor development and skill acquisition.

All recreational and leisure-skill activities can be divided by type of participation--active and sedentary. Active participation includes activities which promote physical fitness by developing strength, endurance, balance, agility, coordination, and improved cardio-vascular function. In this category, objectives for multiply disabled individuals center around developing gross motor abilities which enable an individual to participate independently in community recreational programs. Sedentary participation includes activities which require a minimum of physical endurance and gross motor coordination while providing socialization options and constructive alternatives for using leisure time. Prescriptive planning for disabled individuals should include activities selected from both active and sedentary categories.

Following selection of activity objectives from these categories, a second characteristic of leisure and recreational activities must be considered. Activities can be subdivided in terms of group or individual involvement. Need for group or individual instruction can be determined by analyzing needs and entry-level skills of a learner. For example, many disabled individuals need individualized basic skill development before more complex group activities can be introduced. Occurrence of maladaptive behavior or absence of social skills may inhibit group participation. As maladaptive behavior is extinguished or as the individual progresses toward social competence, transition from individual skill development to group participation should transpire. In some cases motor involvement is so severe that individualization is always necessary when activities are directed toward progressive motor control. However, such individuals should be included in group activities which provide opportunities for social and emotional development.

Prescriptive planning for individuals with a variety of physically disabling conditions should lead to the individual becoming a more functional and independent person. Acquiring physical skills and abilities not only provides the person with



opportunities to participate in recreational and leisure activities, but may increase skills in personal care and physical skills. Activity objectives for a hemiplegic individual, for example, may center around body awareness and laterality. As a result of increased awareness and skill, the individual may increase level of independent functioning in dressing. A paraplegic individual may also be working toward an objective requiring active participation to achieve individual skills that increase upper extremity strength which, in turn, carry over to the self-help area of wheel chair transfers. An individual with severe spastic cerebral palsy may be working toward increased trunk extension through a prescribed set of objectives met through individualized, active participation which, when achieved, allows greater postural control for engaging in group, sedentary activities. Prescriptive planning can only be achieved through such matchings of individual characteristics and needs to recreational activities.

It is often necessary to adapt a given prescription to facilitate learning; each adaptation designed to accommodate a disability has implications for overall program organization. Prescribed objectives and associated activities for each learner should be modified to include specific actions needed to increase potential involvement and consequently learning. Such modifications might include adjustments of the environment, equipment, or procedures inherent to an activity itself. Caution should be taken so as not to overadapt in any of the three areas; modifications are needed only when a task cannot be successfully completed without them. Individual learner characteristics in conjunction with specific activity objectives dictate areas in which modifications are necessary.

Analyses of component steps in each activity indicate physical skills and motor abilities needed for participation. Since an intended outcome of any program is individual participation on equal bases with peers, initial adaptations should consider modifying or introducing equipment to accommodate the disability. For example, lack of mobility may be the inhibiting factor for a paraplegic individual. Customized wheel chairs, scooter boards, or chain driven vehicles such as a rowing car, partially equalizes the mobility factor while providing additional exercise for increasing upper extremity strength. A more severely physically disabled individual may require assistance from a peer or professional in order to participate in an active group sport. Assistance should always serve to facilitate an individual's participation, not act as a substitute.

Motor disabilities may also require equipment modifications based on the individual participant's characteristics. Individuals with grasp/release problems, for example, may need equipment strapped to their hands. Or, an individual with poor coordination or uncontrolled movements may benefit from game pieces that insert into predilled holes on a playing board. The key to equipment modification is facilitation of participation by circumventing the disability. In planning, however, equipment modifications seldom aid in developing increased motor control; they provide a necessary adjustment for participation.

Environmental adaptations may also be needed to meet needs of multiply disabled individuals. For example, the physical size of a playing area may be reduced for individuals with mobility deficits or limited endurance. Reducing space may also aid participants who find large areas too distracting; areas can be gradually increased as learners become more skilled and more capable of handling open space. The opposite may be true when developing some specific skills. For example, to develop balance and laterality in locomotor activities, the width of the alley would gradually decrease in the following objective--

- .. Given a three foot wide alley, the learner will walk backwards for ten feet without stepping on either side line.

Environmental modifications in the form of group size and alternative sites may also be necessary. A behavior disordered individual may require a gradual increase in number of participants in an activity, as well as in the number of activities taking place in immediate, surrounding areas. In addition, ability to participate in an individual or group activity in one location, does not necessarily enable a multiply disabled individual to participate in another place. Care should be taken not to promote reliance on environmental cues for participation as these cues may not be available in other locations.

Procedural adaptations often facilitate learning of sports and games. Rule modifications are the most common procedural changes. However, unless universal modifications exist, it is best not to overadapt group sports because...

- ...many multiply disabled individuals will have difficulty altering what they have learned, and

...opportunities for community participation become more limited.

For complex games and sports, teach and practice skills in creative parallel activities and, then, apply skills to the specific new game. Procedural modifications for acquiring skills on an individual basis must be planned and implemented as modified task analysis. After stating sequential behaviors encompassed in a given task, specific alterations can be made to accommodate individual disabilities. For example, in volleyball one might establish the leisure objective, "Given a volleyball, the learner will serve the ball into the opponent's court on four of five attempts." Associated task analysis on which planning could be based could be written as follows--

1. Face the net.
2. Stand in a forward stride position--foot opposite hitting arm forward.
3. Hold the ball on the surface of the non-dominant hand, in front of and to the hitting arm side of the body:
4. Swing the arm backward while keeping it straight.
5. Swing the hitting arm forward while looking at the back of the ball.
6. Hit the back of the ball with the heel of the hitting hand.
7. Follow through towards the net by continuing the pendulum arm motion. (Schmidt, 1978)

Adapting prescribed objectives and activities for an individual learner in any of the three potential areas involves complex decision-making. Factors influencing decisions range from the age of the disabled individual to availability of staff and facilities. Realistically, each of these major factors can be considered through the use of systematic planning guides. (Figure 1)

Since all areas where modifications can be made are interrelated, program organization evolves as prescriptions are adapted to meet needs and abilities of individuals. For example, staff needs should be related to types of activities selected for individual participants. A final factor, assistance versus non-assistance, in performing an activity must be considered in overall implementation of a prescription. This factor has staff implications for both the teaching process and the ultimate level at which an individual functions independently within the community.

**Figure 1**

**Planning Guide for Activity Selection, Adaptation, and Support**

PLANNING	PRESCRIPTION	ACTIVE PARTICIPATION	SEDENTARY PARTICIPATION
ACTIVITY SELECTION	GROUP		
	INDIVIDUAL		
ACTIVITY ADAPTATION	EQUIPMENT		
	ENVIRONMENT		
	PROCEDURE		
ACTIVITY SUPPORT	PEER		
	PROFESSIONAL		

**Summary**

Prescriptive planning for acquiring recreational and leisure skills by multiply disabled individuals must represent a cooperative effort between adapted physical educators, therapeutic recreational specialists, and special educational personnel. Planning should begin with design of normalized programs, assessing present status of individuals, and developing an environment which matches individual needs and functional characteristics. Objectives for an individual can then be developed on an interdisciplinary basis, thereby providing a common goal for acquiring and maintaining skills for application in alternative environments. Based on a consistent general goal, each specialist can develop a set of individual, behavioral objectives and related activities within his/her areas of expertise. Activities should be

selected to include both active and sedentary involvement, and based on individual needs and characteristics, varying degrees of individual or group participation. Where needed, equipment, environment, and/or procedures can be adapted to meet individual participant needs, or personal assistance by staff members or peers can be provided. Through systematic planning and implementation, individualized prescription, and continuous evaluation of learner progress, multiply disabled individuals can assume their rightful places in available community programs.



A Green Beret helps a severely mentally retarded participant accomplish his goal - successfully reach the top on a rappel line.

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A little help never hurts - an instructor lends a helping hand to assist a mentally retarded skier. Note graduated length ski as still another approach to individualizing instruction.

The American Alliance for Health, Physical Education, Recreation and Dance does not discriminate in any of its programs and activities on the basis of race, religion, color, national origin, sex, or handicapping conditions.

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