

Transition of Students With Disabilities Into Community Recreation: The Role of the Adapted Physical Educator

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The mission of education is to prepare all students with and without disabilities for adult life in the community. Recent amendments to Public Law 94-142 now require transition services, which promote movement from school to postschool activities, for all students with disabilities to begin as early as age 14 and to be included in the student's IEP. Most special education programs provide vocational, domestic, and community independent living skills training. However, the same cannot be said for lifelong sport and fitness training. A life-skills model for teaching sport and fitness skills that are chronologically age appropriate, functional, and community based is preferred to the traditional developmental approach for teaching adapted physical education. The life-skills model for teaching adapted physical education changes the setting—from school sport facilities to community sport and recreation facilities—in which adapted physical education classes are conducted. It also expands the role of the adapted physical educator from direct service provider to include transition team member, consultant to regular physical education and community sport and recreation agencies, trainer of support personnel, and environmental analyst.

The mission of education is to prepare all students with and without disabilities for adult life in the community (Snell, 1988). Current special education curriculums for students with disabilities reflect this focus and, as such, have changed from a traditional developmental approach to a functional, chronologically age appropriate, community based approach (Brown et al., 1979; Falvey, 1989). Often called a community based curriculum (Falvey, 1989) or a functional, life-skills curriculum (Wehman, Renzaglia, & Bates, 1985), the key is helping students acquire meaningful skills that will allow them to be as independent as possible in four distinct, yet equally important, life-skill domains: vocational, domestic, community, and recreation (Brown et al., 1979; Falvey, 1989; Wehman et al., 1985). Also, recent changes in Public Law 94-142, now

called the Individuals with Disabilities Education Act (IDEA), require transition services for students with disabilities to begin as early as age 14 and to be included in the student's Individual Education Program (IEP). Transition services are defined as a coordinated set of activities designed within an outcome oriented process that promote movement from school to postschool activities, including postsecondary education, vocational training, integrated employment, continuing and adult education, adult services, independent living, and community participation (Public Law 101-476, 1990).

Most special education programs provide training in the first three domains. Vocational preparation programs for students with disabilities consist of a spectrum of services including adult day programs, sheltered workshops, supported employment, and competitive employment (Bishop & Falvey, 1989). Domestic preparation consists of activities that promote independent functioning in home environments, for example, personal health and hygiene, housekeeping, clothing care, meal preparation, and family life and health concerns (Freagon, Wheeler, McDannel, Brankin, & Costello, 1983; Wehman et al., 1985). Community preparation consists of activities that maximize independent functioning in a wide variety of community environments (Freagon et al., 1983; Wehman et al., 1985).

Unfortunately, the same cannot be said for recreation/leisure training even though many educators believe that training in recreation is an important part of the student's overall development and ability to lead a successful and fulfilling life in the community (Bishop & Falvey, 1989). Recent research has demonstrated that students with disabilities, including those with severe disabilities, can acquire and perform meaningful, community based recreation skills (e.g., Banks & Aveno, 1986; Hambre-Nietupski, Nietupski, Sandvig, Sandvig, & Ayers, 1984; Nietupski et al., 1986; Schleien & Larson, 1986; Voeltz, Wuerch, & Bockhaut, 1982). Why then do education programs often limit recreation training opportunities to their students with disabilities?

We propose three reasons. First, some professionals and school administrators do not feel that training in recreation skills is a priority. For these professionals, helping a student acquire the skills needed to obtain employment and live as independently as possible in the community are more important than helping him or her acquire the skills needed for appropriate use of leisure time. They believe that students will acquire recreation skills naturally once they are gainfully employed and living successfully in the community. Unfortunately, research does not support this belief (Dattillo, 1991).

Second, many school systems do not employ therapeutic recreation specialists, and thus classroom teachers, who often have little training and experience in recreation, must provide recreation training. The U.S. Department of Education reports that in 1989 only 284 recreation therapists were employed to serve students with disabilities. This is 41% fewer than the number employed in 1988 (U.S. Department of Education, 1991). While well intentioned, many classroom teachers offer their students a limited array of recreational experiences such as playing card and board games, going to the library, listening to music, and bowling. Few classroom teachers have the training and motivation to offer students with disabilities the full array of recreation opportunities.

Third, adapted physical educators, who along with recreation therapists are well trained in recreation programming for students with disabilities, often do not

teach lifetime recreation skills to their students. Many believe it is not their role to teach lifetime recreational activities. Other adapted physical educators follow a developmental approach, limiting older students' exposure to functional, age inappropriate activities offered in community recreation programs. Still others who attempt to present chronologically age appropriate activities present these activities in the confines of the school setting. The student then must generalize skills learned in the school to a community based recreation setting. Unfortunately, students with disabilities often have difficulty generalizing skills learned in a school environment to a community environment (Bishop & Falvey, 1989).

Employing more school therapeutic recreation specialists to improve the quantity and quality of recreation skills training is one solution. However, given the current fiscal state of most school systems, this solution is unlikely. Better preparation of special educators in recreation training skills is a second solution. But due to the regular education initiative, preservice special education curriculums are mandating more regular education preparation. A third and more viable solution is to emphasize a functional, community based, lifetime sport and fitness skills curriculum in physical education and adapted physical education, particularly at the secondary level where students with disabilities prepare to transition into employment and independent living in the community. There were 5,957 adapted physical educators employed in 1989 (up 6.8% from 1988) to serve students with disabilities (U.S. Department of Education, 1991). Since most regular and adapted physical educators have received preservice training in lifetime leisure sport and fitness skills training and are familiar with community based recreation settings such as YMCAs, health clubs, and recreation centers, this is the most efficient solution.

The purpose of this paper is to share with regular and adapted physical educators some ways in which they can provide functional, community based, life-skills leisure sport and fitness training that will facilitate the successful transition of students with disabilities from school to postschool, community environments. The first part will focus on the life-skills model and how it can be integrated into the physical education curriculum. The second part of this paper will identify the role of the physical educator on a transition team.

Life-Skills Model

Many physical educators have been trained in the developmental approach to teaching physical education. In this "bottom-up" approach, students are exposed to a hierarchy of skills beginning with simple, fundamental patterns of movement and progressing to complex sports movements and concepts (Auxter & Pyfer, 1989). The hallmark of the developmental approach is the notion that a student must master certain "prerequisite" skills before mastering more advanced skills. Many students with severe disabilities never master these lower-level prerequisite skills. Consequently, these students are never given the opportunity to participate in activities such as individual and team sports and lifetime recreation activities that require more complex skills, activities that would be more meaningful and useful to them as they prepare to leave school and enter the community (Block, 1992; Moon & Bunker, 1987).

An alternative model is a "top-down" or life-skills approach in which skills are taught based on a student's chronological age, the functional utility of

the skills, and the applicability of that skill in the community (Auxter & Pyfer, 1989; Block, 1992; Brown et al., 1979; Moon & Bunker, 1987). The life-skills model is based on the following philosophies:

Chronological age appropriateness refers to teaching skills based on a student's chronological age rather than his/her mental age or functional abilities (Brown et al., 1979). While it is important to consider a student's functional abilities when determining *how* to present skills and activities, the decision regarding *what* activities to select should be based on activities that the student's same-age peers enjoy (Block, 1992). In terms of physical education, an 18-year-old student with disabilities should participate in the same activities in which nondisabled 18-year-olds participate. Aerobics, swimming, bowling, team and individual sports, lifetime recreational activities, and dance are some examples.

Functional skills refer to a variety of skills that are frequently used by all persons in the four life-skill domains. These include skills that affect survival and physical well-being as well as those that affect a person's ability to function as independently and productively as possible in everyday life (Brown, 1987; Brown et al., 1979; Moon & Bunker, 1987). Most (not all) developmental skills are nonfunctional since they have no relevance to one's successful and independent participation in home, school, and community settings. For example, the task of throwing a bean bag at a target in order to improve the throwing pattern of a 16-year-old student with severe disabilities is nonfunctional since such an activity will have no effect on his/her ability to become more successful and independent in everyday life. A more functional physical education activity would be learning how to roll a bowling ball or bocce ball (perhaps down a ramp), toss a horse shoe, or shoot a basketball into a basket (perhaps a lower basket or smaller ball). All these activities incorporate the skill of throwing but, unlike throwing a bean bag, they employ equipment, rules, and settings that are likely to enhance participation in community activities long after the students have graduated from school.

Community based instruction in natural environments refers to teaching students with disabilities some chronologically age appropriate, functional skills in environments in which these skills will be used rather than in artificial settings. The most obvious reason for conducting recreational programs at local facilities is that students will not need to generalize the skill from a school environment to a community. For example, if shooting baskets is a targeted activity in physical education, then training in basketball shooting should be conducted at a local community center where students will eventually go to shoot baskets during their free time after school or after work. In addition to the skills of shooting, skills such as traveling to and from the center, showing an ID card, locating a locker and changing clothes, asking for a ball at the equipment room, finding an empty basket, retrieving the ball, sharing the court, and taking turns with others can be taught at the community center.

Principle of partial participation suggests that students with severe disabilities may not be able to acquire all skills needed to participate independently in life-skill activities. However, with the addition of physical assistance and adapted equipment, most students can participate in sport and fitness life-skill routines in the community. For example, a 19-year-old student with severe disabilities may need physical assistance to enter a local YMCA, change into his swimsuit, and get into the water, but once in the water with a personal flotation device, he can swim relatively independently.

In summary, the life-skills approach to educating students with disabilities relies on a curriculum based on real-life skills that are chronologically age appropriate, functional, and community based. Life-skills are more meaningful to the student with disabilities than developmental skills, because life-skills will enable the student to participate in community based sport and fitness programs after graduation from school. Readers are referred to Block (1992) for a more detailed description and examples of the life-skills approach in physical education.

The Role of the Adapted Physical Educator in Leisure Education

The adapted physical educator plays a vital role in helping to develop, plan, and implement the leisure component of the life-skills curriculum for students with disabilities. Most adapted physical educators will find that assisting the transition team in the development of a leisure program will be relatively easy, extremely stimulating, and fulfilling, but will require significant changes in teaching philosophy and program content. As a member of the transition team, the adapted physical educator will be called upon to do several things:

1. Identify community based sport and fitness facilities: Whether through professional or personal contact, most adapted physical educators have a good understanding of which community based sport and fitness facilities are available in the community, who runs these facilities, the accessibility of the facilities, and what activities each facility offers. Thus the adapted physical educator is a valuable member of the transition team in helping to determine which facilities are most appropriate for individual students.
2. Work with the community based facility staff: Ideally, a physical educator should be able to walk into a local facility and work with students without the need for any prior discussions with the facility's staff. In some cases this does happen. However, in most situations the facility's staff may be unsure of allowing a student with disabilities, particularly students with severe disabilities, to participate in ongoing programs. The adapted physical educator can alleviate any potential problems by meeting with the facility staff to fully brief them on the nature of the program, the students' disabilities, and safety and organizational factors that will minimize risk of injury and ensure proper use of equipment. Working closely with the facility's staff ensures that students with disabilities are welcomed into the facility as any other member of the community.
3. Conduct ecological inventories and discrepancy analyses: An ecological inventory analyzes environments in which the student is expected to function (Brown, 1987; Brown et al., 1979; Moon & Bunker, 1987). This inventory analyzes what a nondisabled person typically does when participating in a specific activity. The analysis begins with identifying the subenvironments and the activities within each environment. In Table 1 is an example of the subenvironments and activities for "using the weight room at the YMCA." Also included in the inventory are specific materials and performance criteria needed to participate in the activity. Once the ecological inventory is completed, a discrepancy analysis compares the student's skills to those needed to perform each activity in the various subenvironments (Schleien & Ray, 1988). The discrepancy analysis identifies which activities the student can perform independently and which will require minimal assistance, extensive assistance, or adaptations. It also suggests

Table 1
Sample Environmental Inventory With Discrepancy Analysis*

Student's name: Jonathan Smith	Students birthdate: 8-10-74	Teacher: M. Brown (APE specialist)
Environment: YMCA weight room	Initiation of program: 6-21-92	Suggested assistant: Steve Smith (peer tutor)

	What are the steps that a person without disabilities uses?	What assistance does the student with disabilities currently need?	What adaptations or levels of assistance might help this student?
Subenvironment	Entering YMCA		
Activity 1	Opens doors to facility,	I	None needed
Activity 2	locates check-in desk,	I	None needed
Activity 3	shows ID card	V	Natural cues from desk clerk
Subenvironment	Locker room		
Activity 1	Locates locker room	V	Teach student to use natural cues on wall; add arrows on walls
Activity 2	Enters locker room	I	None needed
Activity 3	Locates empty locker	V	Teach student to ID lockers without locks
Activity 4	Takes off clothes	I	None needed
Activity 5	Places clothes in locker	I	None needed
Activity 6	Puts on exercise clothes	P	Use pull-on clothes; equip shoes with special ties
Activity 7	Locks locker	P	Repeated practice; perhaps longer lock, key lock might be easier than combination lock
Subenvironment	Weight room		
Activity 1	Locates weight room	V	Natural cues on walls; have extra cues on walls
Activity 2	Finds corner for stretching	V	Teach student to seek a place where no one else is working out
Activity 3	Performs stretching activities	VP	Teach student stretches; use picture card
Activity 4	Locates first weight machine	V	Use picture cue card
Activity 5	Places correct weight on machine	P	Show student how to change weights; use picture cue card
Activity 6	Performs movements for machine	V	Demonstrate movements; give picture cue card
Activity 7	Records repetitions on sheet	P	Use picture cue card; round number to 5, 10, or 15
Activity 8	Locates next weight machine	V	Use picture cue card
Activity 9	Follows activities 5-8 above	VP	Same adaptations as above
Activity 10	After using all machines, locates stationary bike	I	None needed
Activity 11	Rides stationary bike for 5 min for cooldown	I	None needed
Subenvironment	Locker room		
Activity 1	Locates locker room	V	Use natural cues on wall; use additional wall cues
Activity 2	Enters locker room	I	None needed
Activity 3	Locates locker	V	Tape colored sign on locker
Activity 4	Takes off exercise clothes	I	None needed
Activity 5	Places exercise clothes in gym bag	I	None needed
Activity 6	Gets towel, soap, shampoo	I	None needed
Activity 7	Locates shower	I	None needed
Activity 8	Turns on water and modulates water temperature	P	Practice starting with cold and gradually adding hot
Activity 9	Shampoos hair and washes self	V	Start from top and work down; practice
Activity 10	Turns off shower and collects personal items	I	None needed
Activity 11	Dries self off	V	Start from top and work down; practice
Activity 12	Locates and uses deodorant	I	None needed
Activity 13	Puts on street clothes	P	Use pull on clothes; use special ties for shoes
Activity 14	Goes to mirror and combs hair, checks appearance	V	Start from top and work down; cue in on hair combed, shirt tucked in, shoes on correct feet
Activity 15	Places all personal belongings in gym bag	V	Teach student to check area and locker; use picture cue card
Activity 16	Leaves locker room and goes to front of YMCA	V	Use natural cues on wall; use additional wall cues

Key: I = Independent D = Demonstration P+ = Physical assistance (student tries to help)
V = Verbal cues or reminder PP = Physical assistance P = Physical assistance (student is passive)
P- = Physical assistance (student fights assistance)

*Adapted from P. Campbell (1989), Students with physical disabilities. In R. Gaylord-Ross (Ed.), *Integration strategies for students with handicaps* (pp. 53-76). Baltimore: Paul H. Brookes.

Transition into Community Recreation

activity modifications needed for successful participation in the environment. Table 1 also presents a discrepancy analysis for a fictitious student.

4. Determine the amount of support needed by each student: The support needed to ensure each student's success in a particular environment will vary based on the student's abilities and the requirements of the activity. Ideally, the majority of students with disabilities educated in the community will learn to respond to the natural cues of the targeted community setting. Realistically, some students will need verbal cues and reminders to be successful. Others may require one-on-one assistance with major adaptations to equipment. The adapted physical education specialist can assist the transition team in determining how much and what type of support each student needs to be successful and in purchasing or adapting equipment for particular students. The ecological inventory and discrepancy analysis described above can be used to help determine the amount of support each student will need. Also, Block and Krebs (1992) have outlined a "continuum of support" for physical education which delineates various levels of support that a student with disabilities would need in order to be successfully integrated into regular physical education. This model can easily be adapted for students transitioning into community sport and fitness programs.

5. Determine who will provide the support: educate support personnel: Who provides the needed support for a particular student is determined by how much and what type of support each student needs. For some students, the staff at the facility (with guidance from the staff at the student's school) can provide the needed assistance. For example, many health clubs and YMCAs employ full-time staff to help clients with weight lifting equipment. Other students may need help from a peer tutor or volunteer from the community. Still other students—those with more severe disabilities or medically fragile conditions—may, for safety reasons, require one-on-one assistance from a paraprofessional, teacher, therapist, or adapted physical education specialist. The adapted physical education specialist assists the transition team in determining who should work with each student as well as in educating support personnel. As in the case above, the goal is to have students with disabilities respond to regular support staff of the targeted environment.

6. Help write individual transition programs (ITP) for each student: Based on information collected in the ecological inventory and discrepancy analysis, the adapted physical education specialist should write an ITP for each student receiving community based leisure sport and fitness education. Similar to the individualized education plan (IEP), the ITP targets the key skills needed to be successful in a community based program. Figure 1 contains an example of an ITP.

7. Implement the community based leisure sport and fitness program: The adapted physical education specialist should spend at least one day a week at the community sport or fitness facility helping to supervise and implement the program. The role of the adapted physical education specialist can vary from one-on-one or small-group direct service provider; to supervisor to the facility's staff, peer tutors, and paraprofessionals; to observing students and helping with data collection; to discussing the overall program and any specific concerns with the facility's staff and supervisors.

8. Conduct ongoing and summative evaluations: The adapted physical education specialist should regularly assess each student's progress toward his/her

Student's name: Jane Smith
Student's school: City High School
Classroom teacher: Ms. Jones

Student's birthdate: 2-7-74
Program initiation date: 9-15-91
APE specialist: Mr. Brown

Long-term goal (1): Jane will demonstrate the ability to independently participate in a beginning, low-impact aerobics class at the Campus Recreation Center at Northern University.

Short-term instructional objectives:

- (1a). Following the natural cues in the environment, Jane will enter the recreation center, show her ID, and locate the locker room with 100% accuracy 4/5 days.
- (1b). Following natural cues in the environment, Jane will locate an empty locker, place her gym bag in the locker, lock the locker, and push her wheelchair to the aerobics room with 100% accuracy 4/5 days.
- (1c). Following the directions given by the aerobics instructor, Jane will participate in a low-impact aerobics class doing all upper body movements and making necessary modifications for leg movements (with assistance from APE specialist and aerobics instructor). Successful participation will be defined by Jane maintaining her heart rate at a target level of 60-75% of maximum for 30 continuous minutes.

Figure 1 — Sample individual transition plan (ITP) for community based physical education program.

ITP goals. Ideally, assessment data should be collected every physical education session. The adapted physical education specialist can collect the data or let peer tutors and paraprofessionals do so. The ecological inventory discussed above (see Table 1) can be used as a data sheet for ongoing evaluation, not slight modifications of steps and/or equipment needs for each student. The adapted physical education specialist also should write a summative report at the end of the activity unit, noting the progress of each student, the change (if any) in attitudes of the community staff, problems to be solved, and recommendations for future programming.

Conclusion

The major purpose of educating students with disabilities is to prepare them for adult life in the community. This is particularly important for students with severe disabilities who often need an inordinate amount of time to learn just a few essential skills. Therefore it is important to carefully select the types of skill program should emphasize (Block, 1992; Brown et al., 1979). The life-skills approach ensures that students with disabilities, particularly older students and those with severe disabilities, will learn meaningful skills that are needed for productive and independent citizenship.

Special education now realizes that the elementary and secondary curriculum for students with disabilities should focus on life-skills education. The last

years has evidenced a dramatic transformation from developmental curriculums to functionally based curriculums. However, many physical education curriculums for students with disabilities have not similarly changed. Helping students to attain motor milestones and refine fundamental motor patterns is appropriate where young children and children with mild disabilities are concerned. However, such a program does not prepare students for community life upon graduation. Will the skill of balancing on one foot for 5 seconds help a student gain access to a local roller skating rink or bowling alley and participate independently in bowling or skating? Will the improvement from a Level I to Level III in the pattern of throwing help students gain access to a local YMCA where they can shoot baskets during open gym? Are we preparing students for life in the community by denying individual and team sports skill education until they demonstrate the "necessary" prerequisite lead-up skills? Indeed, given our traditional time based education system, is there sufficient time for students with disabilities to complete a developmental curriculum?

Adapted physical education specialists are in an exciting position in the public schools. Traditionally viewed as a program for students to have fun and release energy and tension, adapted physical education can now be recognized as an integral part of the life-skills education of students with disabilities, teaching sport and fitness skills needed for inclusion in community sport and fitness programs and helping students make a successful transition into those programs.

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