World Health Organization

ICSSPE
CIEPSS

YOUNG PEOPLE WITH DISABILITY IN PHYSICAL EDUCATION/PHYSICAL ACTIVITY/SPORT IN AND OUT OF SCHOOLS: TECHNICAL REPORT FOR THE WORLD HEALTH ORGANIZATION

Dr. Claudine Sherrill, President (csherrill1@earthlink.net)
International Federation of Adapted Physical Activity (IFAPA)
On behalf of the International Council of Sport Science and Physical Education

---

The purpose of this paper is (a) to describe the status quo (2004) of involvement of young people with disabilities in various forms of physical activity (physical education instruction, physical activity practice, and sport in and out of schools); (b) to document benefits, values, trends; (c) to identify and discuss determinants and constraints to participation in various cultures/environments; (d) to present selected initiatives; and (e) to record key proposals for increasing participation and provide the foundation for global change strategies. The goal is to provide relevant data, references, and websites from both developed and developing countries. As introduction, definitions are presented as well as explanations of the International Federation of Adapted Physical Activity (IFAPA) and adapted physical activity as a profession and service delivery/empowerment system.

Definitions

Definitions are socially constructed and thus vary by language, culture, environment, and time. This paper primarily uses definitions acceptable to a majority of the Board of Directors of the International Federation of Adapted Physical Activity (IFAPA), which conducts its business primarily in English. Inasmuch as the USA is the only country in the world with a federal law that specifically requires physical education for all children with disabilities, definitions will sometimes be taken from this law and its constantly changing interpretations.

The following definitions and explanations are necessary for understanding other parts of this report. The information under *disability* and *adapted physical activity* particularly need to be exported throughout the world by organized professional preparation, in-service education, continuing education, and parent, sibling, and advocate training. This must be done by time-tested change strategies pertaining to beliefs, attitudes, intentions, and practices (e.g., Kozub & Lienert, 2003; Kudlacek, Valkova, Sherrill, Myers, & French, 2002; Sherrill, 2004) and policy changes to foster active living of people with disabilities (Adomaitiene, 2003; Lyons, Taylor, & Langille, 2003).

Young people. This term refers to infants, toddlers, children, and adolescents from birth through age 21. This definition conceptually comes from the USA law called the Individuals with Disabilities Education Act (IDEA),which provides federal policy for free, appropriate public school services until individuals with disabilities reach the age of 22. The term *young people* might also be defined as individuals eligible for school-based instruction and socialization.

Federal vs. State. *Federal (or national) laws* are those that apply to all states, provinces, or all parts of a country, representing a *top-down* approach to change. *State and local* (and their many synonyms) are terms describing levels of policy and governance that are more direct; they are initiated and enforced by ordinary people living in rural areas, towns, villages, and cities. This approach to change is called *bottom-up*.

Relevant data and suggested change strategies are strongly dependent upon which government bodies and/or private agencies control and fund the education of young people. *In the USA, for example, education is the responsibility of state and local governments*. This surprises professionals from other countries because IDEA is so widely discussed. Federal law like IDEA is enacted only when diverse practices among the 50 states can be proved by political powers to negatively affect the health, happiness, and welfare of the nation and/or basic human rights and thus federal intervention is judged necessary. *It must be remembered, however, when working toward change in the USA, that the tenets of federal law must be administered through state and local agencies, which are expected to raise most of the money to initiate change.* Throughout the world, professionals need more training in understanding both law and funding.

Disability. The definitions of the World Health Organization (WHO, 2001) are followed to the extent possible by IFAPA in regard to the terms disability, impairment, and handicap. However, many countries continue to use old, discriminatory terminology, and change is a slow process.

NOTE: This technical paper was prepared by ICSSPE in 2004, as work commissioned by the World Health Organisation (WHO), and to assist in the preparation of resources for young people, in the context of the World Move for Health Day.

Disability, according to Ustun (2003) who explained the new 2001 WHO/ICIDH/ICF terms and constructs to IFAPA members, may serve as an umbrella term for health and health-related states that encompass problems (e.g., impairments, activity limitations, or participation limitations) that result from interactions between personal and contextual (environmental) factors. Or *disability* may refer specifically to *activity limitations*, again attributed to interactions between personal and contextual factors.

Activity limitations, in turn, imply a set of objective, measurable criteria that are used by designated experts to determine eligibility of a person for special services, programs, supports, or help for which funding must be made available. *Activity* encompasses intellectual, social, emotional, or physical functions or any combinations, thereof, as may be observed in specific work, leisure, or daily living tasks. *Limitations* come from interactions among impaired body functions and structures, the nature of activity demands, and societal barriers to participation.

Disability (or its synonym activity limitations) is no longer determined by how a person looks and acts. *Disability, according to new definitions, can be determined only by assessment of individual performance and of context* (generally called *ecological assessment* and supported by scholarly theory). Assessment must relate directly to criteria that describe safe and successful performance in each area of educational, vocational, and health/daily living importance. For example, a person may have a double-leg amputation, Down syndrome, or total blindness and still not be legally disabled, according to WHO, if he or she can perform at an acceptable level in work, leisure, and daily living tasks. Concepts of *safe* and *successful* vary by culture and context, and thus understandings in relation to the new definitions are difficult to teach.

Disability is no longer conceptualized as a global, all-or-none condition. This means that, ideally, persons can no longer be denied access to any program or opportunity simply because of the way they look or act. An underlying assumption of WHO philosophy is that everyone is included or (must be included) in our world. To be excluded or restricted, and assigned to specially designed separate services, requires the meeting of specific eligibility criteria established by experts in each area.

Interpretation of WHO philosophy in North America generally means that physical education teachers will have students with the full spectrum of health/activity conditions in their classes. For needy students to receive special services, programs, or supports, inside or outside the general classroom, the students must be assessed as failing to meet specific criteria that establish minimal level of acceptable performance in each of the tasks considered important within the context of physical education class instruction and practice. This statement sounds harsh, for (of course) a teacher generally helps all of her or his students to the greatest extent possible. However, this explanation is a review of emerging inclusion/exclusion policies related to general physical education over the past decade.

In summary, the emerging philosophy is to start with ALL children in general physical education, conduct assessment, and exclude only those who cannot meet criteria, even with adapted physical education supports. Those excluded from general physical education, of course, will be assigned to one of the many forms of adapted physical education services. In contrast, the old, traditional policy was to exclude children who looked or acted disabled and then, after special education (including adapted physical education) in separate settings, to move the children to integrated classrooms.

In general, *disability* is the preferred term in predominantly English-speaking agencies, international sport organizations, and other structures that pertain to physical activity for people with disabilities. For example, the Paralympic movement uses *disability sport* and *athletes with disabilities* (Steadward, Nelson, & Wheeler, 1994); the Deaf movement uses *Deaflympics*, *Deaf sport,* and *Deaf athletes* (Stewart, 1991); and the Special Olympics movement, which serves only people with cognitive impairments, uses *athletes with intellectual disabilities* (Mactavish & Dowds, 2003). *However, across the world, the new definitions and concepts of disability remain largely unknown.*

Supports or *support services* refer to supplementary resources and aids that are provided in a general physical education environment to enable students with disabilities to be educated with nondisabled classmates to the maximum extent possible. Considerable research has been conducted on supports (e.g., Heikinaro-Johansson, Sherrill, French, & Huuhka, 1995; Lytle & Collier, 2002; Vogler, Koranda, & Romance, 2000). Supports may be extra helpers present as in dual and team teaching, peer tutoring, and various forms of consulting by adapted physical activity specialists. Supports may also be adapted equipment or classroom materials like station labels in large print or braille, sport wheelchairs, and rails on walls to help with balance.

Service Delivery vs. *Therapy.* *Service delivery* refers to the activities of a salaried professional (e.g., teacher, coach, recreator, fitness counselor, tutor) who works directly with individuals with disabilities and who performs one or more of the following job functions: planning, assessment, paperwork and meetings, teaching, evaluation, consultation, advocacy. *Therapy* refers to the activities of a salaried therapist (occupational, physical, dance, speech, music, art, recreation, activity) who performs tasks related to rehabilitation and medically-prescribed wellness programs.

International Federation of Adapted Physical Activity (IFAPA)
www.IFAPA.net

IFAPA, an affiliate of the International Council of Sport Science and Physical Education (ICSSPE), is the only international organization that specifies physical activity (all forms: educational, recreational, elite competitive, therapeutic, developmental) for persons with disabilities as its sole mission and purpose. IFAPA's vision (2003 board meetings) is "the worldwide organization that promotes theory and empowers practice for lifelong physical activity of individuals with disabilities". Realizing IFAPA's vision entails advocacy for social justice as well as advancing knowledge and understanding of physical activity and sport by initiating policy making, coordinating, promoting, and sharing of research and evidence-based practice worldwide.

IFAPA, founded in 1973, by Clermont Simard, Laval University, Canada, and colleagues in French-speaking Canada and Belgium, has held an international symposium every 2 years since its first meeting in Quebec City in 1977. This, along with committee activity, a website, newsletter, and an official scholarly journal *Adapted Physical Activity Quarterly*, are the major vehicles for conveying new knowledge and practices to leaders in its six regions, who in turn work with direct services personnel to promote high quality of life through lifetime habits of physical activity for persons with disabilities (conceptualized as activity limitations caused by the interaction of personal and contextual factors).

IFAPA regions, and their affiliated organizations, are as follows:
Europe: European Association for Research into Adapted Physical Activity (EARAPA), founded in 1987
Asia: Asian Society for Adapted Physical Education and Exercise (ASAPE), founded 1978
North America: North American Federation of Adapted Physical Activity (NAFAPA), founded 1994
South and Central America: Developing
Africa: Developing
Oceania: Developing

The International Symposium for Adapted Physical Activity (ISAPA) rotates from region to region and has been held in Quebec City, Brussels, New Orleans, London, Toronto, Brisbane, Berlin, Miami, Yokohama, Oslo/Beitostolen, Lleida/Barcelona, Vienna, and Seoul. The 2005 ISAPA will be held in July in Pavia/Verona. These symposia have generated outstanding proceedings that bring together philosophy, knowledge, and practices from around the world. These and a growing number of excellent textbooks in several languages (e.g., Block, 2000; Malkia & Rintala, 2002; Reid, 1990; Sherrill, 1976; 2004; Steadward, Wheeler, & Watkinson, 2003; Winnick, 2000) provide the beginning foundations for adapted physical activity as a scholarly discipline underpinned by much diverse research (See list of proceedings under ISAPA in appendices; proceedings also appear in reference list under names of editors).

The *Adapted Physical Activity Quarterly* (APAQ), established in 1984 and adopted by IFAPA as its official scholarly journal in 1994, is published by Human Kinetics, Champaign, IL, which is internationally known for publications in health, physical education, recreation, dance, and fitness. See www.humankinetics.com

The impact factor of APAQ, reported annually by the *Journal Citation Reports* (JCR), a product of the Institute for Scientific Information (see http://jcr.isihost.com), is a factor often considered in promotion and tenure for professionals who publish their work. The impact factor of APAQ has been high, compared with other scholarly journals in sport science and exercise (Reid & Ulrich, 2001). The APAQ Editorial Board includes representatives from several countries, and APAQ publishes a good sample of the best work emerging throughout the world.

Adapted Physical Activity as a Profession and Service Delivery/Empowerment System

Adapted physical activity is defined as "service delivery, pedagogy, coaching, rehabilitation, therapy, training, or empowerment conducted by qualified professionals to enhance physical activity goal achievement of individuals of all ages with movement limitations and/or societal restrictions (i.e., attitudinal and environmental barriers)" (Sherrill, 2004, p. 4). The definition of adapted physical activity has been frequently updated in accordance with societal changes (Reid, 2003; Sherrill & DePauw, 1997). This definition, for example, aims to support the World Health Organization's (2001) definition of disability. Other definitions support the triad nature of adapted physical activity as (a) field-based activities of service delivery/empowerment; (b) a profession concerned with advocacy, appropriate professional preparation, and the monitoring of quality of service delivery; and (c) a scholarly discipline or distinct and unique knowledge/research area that generates the knowledge base for adapted physical activity.

This topic is presented here because adapted physical activity is believed to be one of the most viable delivery systems for promoting physical activity for persons with disabilities and for continuing to develop a scientific knowledge base to support relevant practices and human rights. Adapted physical activity has evolved as a multidisciplinary, interdisciplinary, and crossdisciplinary movement (depending on purpose and sources) because the

goal of physical activity for all children, especially the underserved and under recognized, is a concern of many peoples and structures (homes, schools, hospitals, rehabilitation centers, agencies, governments).

Adapted physical activity, which evolved from Swedish medical gymnastics, therapeutic exercise, and correctives in the late 1800s, has been known by many names. Brought to the USA primarily by European physicians, various exercise systems designed to promote health and fitness were infused into new public school systems and professional preparation programs in the early 1900s (for primary sources, see Sherrill, 2004). The philosophy, goals, and content of these exercise systems influenced and was influenced over the years by many academic specializations and interests (mainly special education, therapeutic recreation and leisure education, sports medicine, physical and occupational therapy, disability studies [a relatively new branch of sociology], and disability sport). These influences came from many countries as well as from personnel from the many new facilities built specifically for persons with disabilities in the 19th century. Among the best descriptions of pedagogy used in state-supported schools for residents with intellectual and/or sensory disabilities was that of R. Tait McKenzie (1909) in *Exercise in Medicine and Sport.*

Adapted Physical Education , A School-Based Term

The term *adapted physical education* originated in the USA in 1952, when the American Association for Health, Physical Education, and Recreation (AAHPERD, now the AAHPERD), published a definition and guidelines for adapted physical education as a recommended school subject for students who could not safely or successfully participate in vigorous, general physical education programs. This first definition implied instruction in separate classrooms, which was consistent with the special education practices of the day. The underlying assumption was that the population to be served by adapted physical education was special education students or school-aged individuals with disabilities (then called handicaps).

Subsequently, in the USA, numerous research studies were presented to law-making bodies and to professionals indicating that special education children were not receiving physical education in many schools. As part of the advocacy movement to make the research data known, members of the Joseph P. Kennedy family began various initiatives for promoting interest and commitment (e.g., awareness speeches to conference groups, 1965; establishment of a national unit within AAHPER, 1965; enactment of laws funding university-based professional preparation in physical education and recreation for persons with disabilities, 1967 and 1975; the founding of Special Olympics in 1968). For descriptions of these initiatives, see Sherrill (1988; 2004), DePauw & Gavron (1995), and Stein (2004). Through these and other efforts, adapted physical education experienced a tremendous growth spurt, becoming almost entirely special education physical education (often called special physical education) and largely funded by special education rather than physical education or general education money. In most schools, the nature of adapted physical education changed and children with activity limitations in general physical education received little attention.

Other countries were concurrently involved in the 1960s and 1970s in initiating physical education and recreation experiences for persons with disabilities, but few records exist and/or are accessible in English. In the 1960s Canadian adapted physical activity leaders hosted a first National Games for Athletes with Disabilities (1968), conducted research, and began a number of special programs, initially at McGill University, University of Alberta, and Lakehead University (Wall, 2003). In Europe, the idea of "Sport for All" was adopted in 1966 by the Council of Europe, no doubt in support of the several countries like Norway and Germany, which had innovated "sport for all" programs in the 1950s and 1960s (De Knop & Oja, 1996). This movement became international and is still widely popular although participating countries have their own individual names for "Sport for All" goals and achievements.

The "Sport for All" movement *no doubt rekindled interest worldwide in physical education for all*. Approximately 25 years after AAHPER's issuing of the 1952 definition, in keeping with new trends, Sherrill (1976) emphasized that adapted physical education, as pedagogy, was not limited to separate or special education (segregated) settings. Adapted physical education could be provided in any setting to any individual with activity limitations. Sherrill's (1976) first definition of *adapted physical education* was widely accepted. It was "the science of analyzing movement, identifying problems within the psychomotor domain, and developing instructional strategies for remediating problems and preserving ego strength" (p. xvii). Reid (2003) discussed the implications of this definition and reviewed other definitions posited by Sherrill and colleagues as they sought to stay abreast of rapid changes in education, service delivery, and human rights.

Today the term *adapted physical education* is primarily used in the USA, Asia, and by some countries when referring specifically to school-based instructional adapted physical education. From the 1970s onward, however, the broader, umbrella term *adapted physical activity* gained popularity internationally as many professionals sought to emphasize lifespan services, self-actualization, and empowerment for persons with disabilities.

Adapted Physical Activity, the Umbrella Contemporary Term

The term *adapted physical activity* was first used by the founders of the International Federation of Adapted Physical Activity in 1973, who probably defined the term and related concepts in French (primary sources not available). In 1983, the first publication bearing the title *adapted physical activity* was published by Human Kinetics (Eason, Smith, & Caron, 1983). This was the proceedings of the 3rd ISAPA and the first of the proceedings to be published and disseminated by a major commercial company. In 1984, the founders of the *Adapted Physical Activity Quarterly* (Geoffrey Broadhead, Claudine Sherrill, and Harriet Lundegren) convinced Human Kinetics Publishers to name its new multidisciplinary journal *Adapted Physical Activity. The intent of this journal was to attract research from many disciplines, but especially from adapted physical education and therapeutic recreation.*

The first systematic attempt to define *adapted physical activity* in English occurred at the 7th ISAPA, held in Berlin, in June 1989. The resulting definition was "Adapted physical activity refers to movement, physical activity, and sports in which special emphasis is placed on the interests and capabilities of individual with limiting conditions, such as the disabled, health impaired, or aged" (Doll-Tepper, Dahms, Doll, & von Selzam, 1990, p. v.). This excellent definition, which refers to the service delivery/empowerment aspect of adapted physical activity, clearly applied to all age groups, including the very old.

When Sherrill changed the name of her textbook from *adapted physical education* to *adapted physical activity* in 1993 (4th ed.), she summarized international perspectives by stating:

> Clearly, adapted physical activity is the name of the present and the future. It is broad and inclusive and emphasizes the theory and practice of adaptation. [This reference to theory and practice was meant to be interpreted as adapting all kinds of contributing variables (personal, environmental, pedagogical]. It [adapted physical activity] recognizes that adaptations are needed for all persons with psychomotor problems, not just those labeled disabled. Professionals in a number of fields and disciplines can make these adaptations (p. xviii).

By the 1990s, almost all references in the Western world to adapted physical activity and adapted physical education emphasized that these terms referred to special services and supports, not places. In general, the international service delivery trend was moving toward integration and inclusion (Block, 2000; Sherrill, 2004; Steadward, Wheeler, & Watkinson, 2003; Van Coppenolle, De Potter, Van Peteghem, Djobova, & Wijns, 2003). However, practices in the field typically lag behind those described in textbooks, policy statements, and law. *No where is this more true than in services and programs for persons with activity limitations.*

Status Quo of Involvement of Young People With Disabilities In Physical Activity

Reports of the status quo of young people with disabilities in physical activity are sparce. In many parts of the world there are no resources for valid and reliable data collection and this research priority ranks low among other critical needs. *Observation reveals that, except for the Australia, USA, and Canada, participation in PE and sports seems to be mostly in special schools and special programs. Young people with some types of disabilities (e.g., intellectual) are more likely to be educated in special schools than others. Leaders, however, in most countries are promoting inclusive philosophies (see text that follows)*. When the sport is competitive rather than recreational, the training seems to be related mostly to development for or current participation in Special Olympics, Paralympics, and Deaflympics rather than inclusive settings.

Number of Persons with Disabilities in the World

Reports vary, and few refer specifically to young people. For instance, Charlton (1998) states "the oppression of 500 million people with disabilities is rooted in the political-economic and cultural dimensions of everyday life" (p. ix). Charlton (1998, p. 6) states that 80% of all of the people with disabilities live in Third World Countries (he cites the United Nations as providing this information, p. 8). Charlton (p. 8) also cites *Rehabilitation International* as estimating that, by 2000, there will be 846 million persons with disabilities in the world. This comprises 13% of the world's population.

As noted earlier under the definition of *disabilities*, statistics will vary according to the legal definitions of each country. With regard to the WHO definition, world organizations or individual countries will have to define *activity limitations* more specifically for specific activity areas and different age groups (infants and toddlers, preschool, school age, working age, retirement age) to determine number of persons whose function is below average and/or who need special help. Determination of the number to be classified as disabled and thus eligible to receive special services that require money over and above traditional general education funding depends, to a large extent, on economic conditions in each locale. When the economy is good, more money is generally allocated to education and to rights

and needs of young people with disabilities. When the economy is bad, the needs of the average citizen are targeted. Thus, the eligibility criteria for receiving services (and the number of persons legally identified as disabled) vary with the times as well as interpretations of laws.

Clearly Third World countries dominated by hunger and other problems and countries with terrorism and war have larger numbers and percentages of disabilities, particularly among young people. The countries with high prevalence of AIDS also need separate consideration.

Special Olympics International, which maintains excellent records, indicates that 1.2 million persons worldwide are Special Olympics athletes (Hunt, 2003). Their goal is to soon provide sport and physical education to 2 million persons with intellectual disabilities. This goal includes all age groups.

In the United States, most sources say that 10 to 15% of individuals in the birth-to-age-22 group have disabilities and could benefit from special education services, including physical education with and without adapted physical activity supports. The U. S. Department of Education documents special education services to only about 2% of this age group. The actual number served in every society depends on the economy and politics. Leaders believe that most young people with disabilities are underidentified and underserved.

Europe

At this time, Europe is the only region of the world that has attempted to assemble data on physical activity involvement (Boursier & Kahrs, 2003; Dinold & Valkova, 2003). As part of the THENAPA project funded by the European Union, questionnaires were distributed in 23 countries: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Netherlands, Norway, Portugal, Poland, Romania, Slovakia, Spain, Sweden, and United Kingdom.

Students with disabilities in these two reports were referred to as Special Needs Children (SEN).This practice follows the traditional terminology of Great Britain (Barnes, 1991). The survey focused on involvement in inclusive PE and sports rather than PE and sport in any setting. Following are some verbatim statements (occasionally with edits) from these reports.

p. 51 SEN tend to be included in the school system but not in PE lessons. The data vary widely. Examples: 30% of SEN in inclusive (ie., general or regular) physical education in Austria; 20% in the U.K. (40% in the inclusive system but only about 6% in PE); nearly all SEN receive PE in special schools in Norway; 7% in several other countries [not clear to me whether 7% refers to inclusive PE or any kind of PE, as in special schools]. Lower number of SEN in PE than in the inclusive school system.

p. 52 School/educational legislation supporting inclusion has been introduced in all countries … these laws stress special education , and PE seems to remain a “blank space”on the map.

SEN have obligatory PE lessons in only 5 countries (Austria, Italy, Slovakia, Sweden, UK) -- however, they do not participate because they are excused, with excuses justified on the basis of their exceptional situation. Physicians (or/and parents, or/and the special education advisory centre) excuse the majority of them. Excuses are not only a problem of SEN but of all children.

p. 52 Besides regular PE lessons there is a system of out-of-class sports -- like swimming courses for beginners, outdoor activities, excursions, exercises during break, etc.…All countries state that they give SEN a chance to choose and participate, but in reality this very rarely occurs (15 countries). Illustrative reasons include regular sport not appropriate for SEN; teachers’ preparation, access, appropriate time, no interest in SEN.

p. 78 School sport exists in almost all European countries (16), but in some countries like Spain, Italy, and Lithuania it is not compulsory. School sport in Netherlands is only implemented in the upper half of the school. Only Greece and Norway don’t have school sport. The general idea in Norway is that leisure time sport should be taken care of by the Norwegian Sport Confederation. The sports organizations of Norway have developed general sport schools where all children can practice various sport activities.

In four countries, school sport is elitist, the emphasis is on performance and less attention is paid to recreation and leisure (Czech Republic, France, Italy, and U.K.).

p. 70 In 8 countries SEN students do not have the possibility to be integrated into school sport (Austria, Bulgaria, Hungary, Ireland, Latvia, Lithuania, Portugal, Poland, and U.K.).

In 9 countries some initiatives can be found (Austria, Belgium, Czech Republic, Finland, Italy, Ireland, and Sweden). Also true in France and Poland.

SEN students can be integrated into school sport at leisure or recreational but not at competitive level (Denmark, France, Italy, and U.K.) or may participate in local inter-school events only (Finland).

p. 108. The participation of disabled persons is not very substantial. Nevertheless, there are many initiatives showing that the situation is improving.

p. 109. Many THENAPA representatives analyze that the low number of disabled persons practicing sport activities might be due to a variety of reasons , such as the numerous barriers (physical, social), lack of information on sport practices for the disabled, weak cooperation between structures, a shortage of adapted physical activity (APA) professionals, etc.

The THENAPA key persons' main comments concern the lack of knowledge of coaches and partners in the field of adapted physical activity.

United States of America

Today, most sources agree that about 95% of all children with disabilities (as defined by U.S. law and identified by multidisciplinary, school-based individualized educational program [IEP] committees) participate in general (inclusive) physical education classes constituting the mainstream. Thus, physical education for young people with disabilities depends largely on the quality of physical education for children without disabilities, state requirements pertaining to number of minutes per week and class sizes, and local policies with regard to enforcement, excuses, and substitutions. *Unfortunately, most of the 50 states do not require physical education for young people without disabilities. This weakens adapted physical activity services, which should be ongoing in general settings as well as separate ones.*

In reality, most physical educators believe that not enough supports (especially qualified generalists and specialist-consultants) are available to make the 95% statistic valid (Block, 1999; Lienert, Sherrill, & Myers, 2001). Although special education needs young people (SEN, using European abbreviation for consistency) each have a law-based individualized education program (IEP) committee meeting and a written IEP approximately every year, the experts comprising the committee seldom give high priority to physical education needs that might require adapted physical education extra supports or services.

Understanding the IEP process is challenging. The much touted law of 1975, that requires physical education (specially designed, if necessary) for all children with disabilities applies only to those children whom the multidisciplinary IEP team find to be disabled specifically in physical education performance. If a child can fit into a general physical education class and be reasonably successful, he or she (regardless of appearance or general function) is not considered disabled. Thus there are children in wheelchairs, on crutches, blind, or intellectually impaired in the USA system who are not legally defined as disabled for physical education.

Decision-making of the multidisciplinary IEP team is sometimes political, taking into consideration school and community resources, and classifying children in math, reading, and science as disabled but not children in physical education, music, and art. Many physical educators therefore believe that the law does not work for them in the same ways that it works for other curricular areas (e.g., Decker & Jansma (1995). For example, great emphasis is placed in the USA law on assigning children with disabilities, after thorough assessment, to a spectrum of *least restrictive environment* placement or services ranging from separate classroom through numerous options that end with general physical education classroom. In physical education, however, most children are simply left in an inclusive classroom (where inclusion is typically physical [meaning proximity] but not social).

Recently, increasing emphasis has been placed on making inclusion social as well as physical. Methods used have included numerous kinds of supports (people, equipment, environment). Among the most successful of these is the employment of adapted physical education specialists to serve as consultants in helping general physical educators build self-confidence, develop positive attitudes, and improve adaptation skills (Lytle & Collier, 2002; Lytle & Hutchinson, 2004).

The USA law continues to support *least restrictive environment* physical education placements and services for young persons with severe disabilities who previously received no physical education services. This is estimated to include about 5% of all young people with disabilities, and adapted physical education specialists are prepared specifically to teach them. The law states that physical and occupational therapy may not substitute for physical education, but this tenet of the law is often violated when young people are nonverbal, nonambulatory, and severely limited in almost all

of life activities. Nevertheless, these persons do attend public schools because the concept of inclusion in the USA (as well as Canada) refers to virtually all young people. No student is considered too disabled for some kind of physical education.

Canada

The history of young people with disabilities receiving physical education in Canada is similar to that of young people in the USA (Reid, 2003; Wall, 2003). Canada does not, however, have a federal law that specifically mandates physical education for all children with disabilities and provides federal monies as incentives to follow the law. Individuals have pioneered in adapted physical education instruction since the 1960s, but today's strong impetus for high quality physical education for young people with disabilities is generally traced to the Jasper Talks symposium in 1986, which "brought together delegates from across Canada to acknowledge past achievements, examine the current situation, and generate strategies for change in adapted physical activity in Canada" (Wall, 2003, p. 37). According to Reid (2003, p. 141) "Inclusion was an integral part of the dialogue at the Jasper Talks. The Active Living Alliance for Canadians with a Disability, created from the Jasper Talks, sponsored the *Moving to Inclusion* project [which began in 1994] to support the inclusion of children in regular physical education programmes."

To assure that *Moving to Inclusion* had an impact on public school physical education throughout Canada, the government structure called Health Canada distributed copies of this curriculum to over 15,000 schools in 1994. Today, over 25,000 have been distributed, and much personnel preparation has been conducted as continuing education, inservice education, and preservice education to facilitate optimal use of this curriculum and to promote the trend of moving from separate to inclusive physical education instruction (Wall, 2003, p. 41).

Concurrently, after the Jasper Talks, Fitness Canada (another government-supported structure) established a National Advisory Committee on Physical Activity for Canadians with a Disability, which developed a *Blueprint for Action* (1998), which was distributed to over 1,000 Canadians. See Wall (2003) for more information on this Blueprint or contact the *Active Living Alliance for Canadians with a Disability* which maintains an especially outstanding website www.ala.ca

Fitness Canada included persons with disabilities in its 1983 national fitness survey as well as other initiatives so that hard data would be available to promote service and programmes. Longmuir and Bar-Or (2000, p. 51) reanalyzed 1983 data of 987 youths with disabilities, ages 6 to 20, and concluded: " Disability significantly influences habitual physical activity levels, perceived participation limitations, and perceived fitness relative to peers....Youths with hearing impairments and chronic medical conditions are more active than those with physical disabilities or visual impairments. Participants with cerebral palsy, muscular dystrophy, and visual impairments are the most limited."

Asia

With major international sport events for people with disabilities scheduled for Asia during this decade, much positive change is taking place. In 2005, Japan will hold the 8th Special Olympics Winter Games in Nagano. In 2007, Shanghai will hold the 12th Special Olympics World Summer Games. In 2009, the Summer Paralympics will be held in Beijing.

Historically, Asia has been active in sports competition. Japan hosted international games for athletes with physical disabilities in 1951 and established the Sport Association for the Physically Handicapped in 1961. The 2nd Paralympics (limited to wheelchair athletes with spinal cord injuries) was held in Tokyo in 1964. Japan had wheelchair basketball teams at that time. The prestigious FESPIC Games originated in Beppu, Oita; Hong Kong hosted them in 1982; Bankok in 1999; and Busan in 2002.

Japan, Korea, Taiwan, and Mainland China

Lin (2003) reported a survey concerning adapted physical activities and sports for people with disabilities in Japan, Korea, Taiwan, and Mainland China. No facts are reported on number and ages of persons involved. Findings indicated that both Japan and Korea have special sport facilities for persons with disabilities in hospitals and employ specialists primarily called *rehabilitation sports instructors* in Japan and *recreation therapists* in Korea (pp. 53-54). In 1998, a total of 102 sports facilities served people with disabilities in Japan. *"In the fields of medical treatment and rehabilitation sports in hospitals Japan is the most advanced"* (Lin, 2003, p. 54).

People with disabilities in Mainland China, Taiwan, and Korea primarily use facilities for the general public when doing sports although Korea does have some special sport facilities for rehabilitation in hospitals. In Mainland China and Taiwan, the specialists conducting sport in hospitals are mainly physicians, nurses, occupational therapists, and physiotherapists.

Japan, Korea, Mainland China, and Taiwan all report some adapted physical education in schools. This is generally taught by special education or physical education teachers. In Korea, in 1997, of the 106 departments of physical education, 42 offered courses in adapted physical education. Yong-In University in Korea (led by Prof Kim Ki Hong) established an adapted physical education department in 1993; this university offers 4-year bachelor's degrees specifically in adapted physical education. Most other universities offer master's degree adapted physical education specialization to certified general physical education teachers. Ewha Woman's University in Seoul (Prof Yang Ja Hong) was perhaps the pioneer university in Korea to provide strong adapted physical activity training at several levels (Yabe & Hong, 1994). In 2000, Taiwan (the National Taiwan Normal University, Prof Man-hway Lin) initiated a master's degree in adapted physical activity and other universities are following suit.

Taiwan

Taiwan is the only Asian country for which details about SEN are easily accessible in English (Lin, 1999). This is because these facts are routinely presented at ISAPAs and reported in ISAPA proceedings. In 1992, "a total of 75, 562 disabled children were enrolled in some form of school, accounting for 2.12% of the total number of students" (Lin, 1999, pp. 18-19). "Compared to the 6.6% receiving special education services in the USA and 11% in Japan, the prevalence rate in Taiwan seems to be relatively low. However, according to researchers in Taiwan the actual ratio [I think she means percentage] may be approximately 7.7%." Most of the SEN in Taiwan have mental retardation, but five categories of disability are identified by law.

Among 1232 schools in Taiwan, 801 have special education classes but only 5.9% have adapted physical education classes (Lin, 1999, p. 19). Lin summarizes, "about 55.1% of all disabled students are participating in sports class like other students, and 29.3% have their sports lectures in groups of students who have the same handicap. Only 15.5% are not participating in these classes" (p. 19).Lin's report made no mention of children with severe disabilities who might be unable to attend special education classes.

Since 1992, the Taiwan Dept of Education has supported extensive in-service and continuing professional preparation in adapted physical education conducted by international experts, usually during summers. Hundreds of teachers have benefited from this initiative. Taiwan has also granted scholarships to a few carefully selected physical education teachers to study adapted physical activity in other countries.

Hong Kong

In Hong Kong "the dominant cultural ideology is that children with disabilities should live at home with their families attend schools specially designed for their particular disabilities" (Sit, Lindner, & Sherrill, 2002, p. 454). As perceived by the parents (95% of whom are ethnic Chinese), "participation in physical activity means a waste of time and hinders academic achievement," the strong emphasis within traditional Chinese culture. These family values affect all physical education, not just that for children with SEN. Some SEN children in Hong Kong live in residential schools (about 78% with visual impairments, 61% with maladjustment; 21% with physical disability; 10% with hearing impairments). According to Sit et al. (2002), no children with mild mental retardation live in residential schools.

Although related literature of Sit et al. indicated that SEN in Hong Kong were mostly sedentary, Sit et al. reported that most of her participants (who represented 10 special schools) participated in at least one sport during their free time (83%); in at least 2 sports (66%); in at least 3 sports (46%); and in more than 3 sports (33%). Location of participation varied significantly by disability; SEN with mental disability and visual impairment mostly used public playgrounds and parks rather than schools, private clubs, or organized lessons. School facilities were the second most popular location of sport.

Indonesia

Indonesia is illustrative of the many countries that are initiating adapted physical activity organizations to promote better quality of life through physical activity. The Indonesian Society for Adapted Physical Education (ISAPA) was founded in August, 2002 (ISAPA, 2003) and reported on its activities at the 14th International Symposium for Adapted Physical Activity (also called ISAPA) in Korea in 2003. Their constitution and by-laws are exemplary. The following facts come from that report.

The distribution of SEN tends to be concentrated in special schools in a few provinces (Jakarta, West Java, Central Java, East Java, and South Sulawesi). Some SEN are scattered throughout the other 25 provinces of Indonesia. No mention of SEN in general education was made. SEN receiving special education instruction are mostly hearing

impaired (45%), visually impaired (30 %), and mild intellectual impairment (13%). No description of physical education (or adapted physical education) instruction is given, and the report's text implies that SEN receive little attention from the physical education profession.

However, the needs and change strategies are understood by leaders (members of ISAPA), who have begun conducting adapted physical activity workshops for teachers. Individuals attending these mostly have no previous training in any kind of physical education.

Oceania (Australia, New Zealand, Pacific Islands)

Australia is best known internationally for the outstanding, long-duration work of the Australian Sports Commission (ASA), which is known for assisting "anyone and everyone involved or interested in the inclusion of people with disabilities in sport and physical activity."(ASA materials, 2001). Since the early 1990s, ASA's Disability Education Program has published and widely disseminated the *Willing and Able* series of physical education and sport personnel preparation books, brochures, disks, and other materials. No other country (or entity) has surpassed or equaled the quality or quantity of Australia's personnel preparation materials and strategies in physical activity for persons with disabilities.

Although the Australian Sports Commission funds its leaders to participate in the International Federation of Adapted Physical Activity, its policy seems to be refusal to use the term *adapted physical activity*, because Australian decision-makers apparently believe that this term still connotes separate physical education for people with disability. The philosophy of Australia in regard to physical activity for persons with disabilities is 100% inclusive, and its implementation of this policy appears exemplary.

A problem occurs internationally, however, in that Australian leaders repeatedly call for a paradigm change away from the terminology and practice of adapted physical activity, which has gradually (with much work) been accepted and implemented in most other countries of the world. Illustrative of the difference in thinking, Australian leader and IFAPA vice president Downs (2003, p. 20) stated: "If APA is about adaptation then it can be described as an exclusionary phenomenon. It is to do with the concept of exclusion of people with disabilities in sports and physical activity." These words are hard to understand in that nearly all philosophical statements about adaptation and adapted physical education in other countries promote inclusion and focus on adaptation as services and supports in all settings. In fact, a current international trend is the preparation of adapted physical activity specialists to help local school districts and general PE personnel in general classrooms with inclusion.

The philosophical split between Australia and other countries appears to be mostly at the terminology and basic assumptions levels and does not seem to affect cooperation and collaboration. Most adapted physical activity specialists in the world would love to have in their own countries the administrative support of government and governing sport and education bodies that Australia models.

Summarizing this issue, Australia requires that all personnel be taught to how to keep children included in all mainstream activities. Official revision of interpretations of the USA law now emphasize that all SEN must remain in general physical education (and thus general educators must know how to teach them) unless a particular child, on rare occasion, can be documented as unable to benefit, even with supports, from general education instruction. Enforcement of law is difficult, however. In most countries of the world, law or policy specifies that all children shall be included to the maximum extent possible. Insofar as I know, the USA is the only country that specifically specifies physical education for young people with disabilities in federal law and mandates, by implication, that physical education pedagogy should proceed the name as other school subjectes.

Australian researchers (generally university personnel) show evidence of the same pedagogical dilemmas as other countries in their studies of inclusive physical education classrooms (Temple & Walkley, 1999). Research from the Royal Melbourne Institute of Technology University, Bundoora, in the state of Victoria, for example, reports that students with mild intellectual disabilities spend significantly less time engaged in inclusive physical education class activities (and presumably learning) than nondisabled classmates. This problem of course needs resolved. Temple and Walkley (pp. 71-72) conclude

> There is obvious cause for concern when students with minimal intellectual disabilities are spending on average only 15% of their lesson successfully engaged with the curriculum. In some settings in this project, 15 % would equate to less than 5 min/week. The low MA and associated high levels of MI behavior indicate a need for curricular and instructional adaptation. Modification to lesson content needs to be planned and tailored for student success.

The Australian Sport Commission is funding a personnel preparation project, called Pacific Sports Ability (PSA), to facilitate involvement of people in New Guinea in inclusive physical activity (a.jobling@mailbox.uq.edu.au). Several workshops will be presented in New Guinea, which will generate leaders for a network of Inclusive Activities Coordinators, one for each of PNG's provinces, who will act as liaisons for future development. After its pilot testing in New Guinea, the template will be rolled out across 16 other Pacific nations (teena.jackson@ausport.gov.au

Africa

Only a few Africans attend ISAPA symposia, and little is known about adapted physical activity and sport on this continent except through occasional published reports of leaders who work in Africa for short periods (De Potter, 1994), oral sharing of other visitors (e.g., Nina Kahrs of Norway, who helps with a Norwegian project in Africa), and occasional articles and correspondence from Africans (e.g., Kolo, 1995).

At least one African is studying adapted physical activity in the USA (Agueda Gomes at Texas Woman's University) and plans to return to her country (Angola) and facilitate the development of adapted physical activity. Surely, others are following this pattern.

In 2003, the Georgia State University in Athens, in collaboration with the International Paralympic Committee and the African Sport Federation of Disabled (ASCOD), provided a 2-week academy for representatives of 15 African countries. This academy was the second phase of a 4-year collaborative project for the development of sports programs for youth with disabilities in Africa and the Middle East and is designed to promote peace and friendship through an educational initiative that identifies and trains emerging leaders from these regions. Training in Phase 1 of this project was primarily conducted by Egyptian sport organizations.

ICHPER. SD Journal (the official magazine of the International Council for Health, Physical Education, Recreation, Sport, and Dance) featured several articles on HIV/AIDS in African countries in its Fall, 2003, issue. "HIV infection disproportionately affects Africans in the sub-Saharan region. Although only 10% of the world population lives in Africa, it is estimated that 70% of all HIV infected people live on this continent." (p. 25)

Central and South America

Little is known about adapted physical education and sport in the Spanish and Portuguese speaking countries, except that Brazil supports IFAPA activities, conducts numerous types of adapted physical education personnel preparation, and maintains an excellent website SOBAMA. Puerto Rico and Costa Rica both employ adapted physical activity specialists prepared in the USA in their universities and schools. Presumably many other countries do this also, but no information has been assembled.

Benefits, Values, and Trends Relating to Young People with Disabilities

The benefits and values of physical activity involvement for young people with and without disabilities are the same, except that the needs are greater among persons with activity limitations. Several sources present outstanding reviews of the diverse benefits and values of physical activity for all young people (e.g., De Knop & Oja, 1996), while others describe benefits and values only for people with disabilities (e.g., Wheeler et al., 1999).

Several articles review or present research on the values of a particular activity for young people with disabilities (e.g., Castenada & Sherrill, 1999 on challenger baseball; DePauw, 1986 on horseback riding).

The most controversial trend is probably integration or inclusion of young persons in school and community physical activity (Block, 2000; Reid, 2003; Van Coppenolle et al., 2003). The controversy is not so much about what is right or wrong, but rather how to achieve total inclusion for all children, and whether this goal is realistic. Until about 2000, the term *integration* rather than *inclusion* was used in European physical education. First, the terms were used interchangeably or combined (e.g., integration/inclusion). Later, *inclusion* was "understood as a process, brought about by daily life integration, education, and physical education (PE) lessons" (Dinold & Valkova, 2003, p. 49). These experts emphasized that inclusion should not be the aim, "but a means to socialisation and independent living, characterized by a range of variants, from the most restrictive to the least restrictive environment" (p. 49).

The trend of integration/inclusion is discussed further under initiatives.

Determinants and Constraints to Participation in Various Cultures/Environments

Politics and economy are the most powerful determinants and constraints. *Politics* here refers specifically to the priorities and subsequent funding that international bodies and government leaders (national, state, provincial, local) give to meeting the rights and needs of people with disabilities.

Constraints

Constraints Specific to Areas Dominated by Poverty and/or War

It is unlikely that physical activity can be the main priority in areas where young people are homeless and hungry. However, when health policies are formulated that emphasize proper food and nutrition as human rights and vehicles to health, physical activity and its many benefits should be specified also. Whenever international bodies convene to discuss health, experts in adapted physical activity should be included among the delegates as well as experts with disabilities. These experts should be representative of the new 2001 WHO/ICIDH/ICF biopsychosocial model rather than limited to the older medical or social models.

When low morale and depression is an issue, research shows that exercise, sport, and dance can be used to improve mental health. Improvements can come through either direct participation or through participation as spectators, hosts, and helpers. Sports engaged in by persons from more than one country and properly planned and conducted promote understanding and friendships that contribute to PEACE.

IFAPA wishes to express its strong support of the United Nations General Assembly, 58th Session, Plenary meetings, 2nd meeting, which passed a resolution that included the promotion of peace as one outcome of physical activity. We look forward to "2005 as the International Year of Sport and Physical Education, as a means to promote education, health, development, and peace." We hope that governments will involve the adapted physical activity and disability sports movements as they "organize events to underline their commitment" and that they will include athletes with disabilities among the sports personalities whom they look to for assistance.

Constraints Specific to Females with Disabilities and Activity Involvement

A large body of literature documents the prejudice, stigmatization, and oppression of women in relation to sport involvement at local, national, and international levels (Doll-Tepper, Scoretz, & Tiemann, 1995; Krotoski, Nosek, & Turk, 1996*; National Women's Studies Association Journal*, 2002). Many countries still do not enter women into the Paralympics, and always the number participating is disproportionate to the female populations. Even the 2003 Special Olympics World Summer Games in Ireland was unable to meet the goal of equalizing participation by gender. Although 7,000 athletes with intellectual disabilities participated, representing 150 countries, only 37% of the total were females (Smallwood, 2003).

Women with disabilities describe themselves as triply disabled (i.e., negatively affected by activity limitation, poverty, and gender) in most walks of life. Women with disabilities appear to be more limited than men by society in regard to obtaining employment and hence tend to have less money and lower quality of life. Less money influences amount of money that can be spent on exercise and sport, which in turn may translate to lower fitness and impaired mental health. *In many cultures, prejudice against females with disabilities is experienced at very young ages when little girls are not introduced to sports and/or may be taught that they will not be fit for marriage and childbearing*.

Constraints of Prejudice, Stigmatization, and Oppression

The long history of prejudice, stigmatization, and oppression experienced by people with disabilities in all walks of life still exists (e.g., Charlton, 1998; *National Women's Studies Association Journal*, Special Issue, 2002; *Sociology of Sport Journal*, Special Issue, 2001)). Therefore, attitude toward general disability and toward specific disabilities of young people is an important variable recognized by many physical activity researchers. (Kozab & Lienert, 2003; Kudlacek et al., 2004: Theodorakis, Bagiatis, & Goudas, 1995). Attempts to change attitude are typically described as *topdown* (as in the enactment of laws and the production of national blueprints) and as *bottom up* (as in integration and inclusion experiments based on contact and other specific theories and tested by research). Much research is now available on measuring attitude toward disability and on change strategies. Kozab and Lienert (2003) provide an excellent review of this research. Both top-down and bottom-up approaches require money over and above what school systems are typically allocated. Laws, for instance, lack effectiveness if no money is authorized for implementation and enforcement. The extra money, in most cases, needs to be directed toward family and teacher cooperation, collaboration, and education. Families and teachers should be integrated in attitude awareness and change workshops, projects, and the like because one group, without the other, cannot do much to change quality of life for young people.

For concrete data about attitudes, the Special Olympics magazine *Spirit* presents findings from a survey of over 7,500 people from 10 countries (Brazil, China, Egypt, Germany, Ireland and Northern Ireland, Japan, Nigeria, Russia, and the USA). Responses from the different countries ranged from 5% to 93% on such beliefs as the ability of persons with intellectual disabilities to sustain friendships, wash and dress, tell time, understand news event, and handle emergencies (Norins, Siperstein, Evangelista, & Corbin, 2003, p. 17). In regard to beliefs about which type of school children with disabilities should attend, samples from all countries answered "special schools" most often.

Constraints of Not Realizing Trends in Attitude Research

The trend is toward use of models that encompass beliefs, attitudes, intentions, and actions with the goal of learning what kind of change strategies work best for specific samples toward specific target individuals, groups, and populations in specific contexts.
Attitude research, correctly planned and conducted, is extremely difficult and should be preceded by much practice with pilot studies. Entire books on attitude research methodology, as well as entire courses on attitude measurement and change, should comprise experience base before an attitude project is begun. Attitude research is often criticized because too much of it is of poor quality.

Survey studies of attitudes of physical education personnel and the development of measurement instruments are giving way to experimental studies based on specific theories (e.g., contact, reasoned action, planned behavior) which can be incorporated into evaluation models used to assess the effectiveness of pedagogy and curricula. Conferences, symposia, and projects of all kinds (including research) should emphasize collaboration between school and university personnel. Numerous sources cite the importance of cooperation and collaboration, but these practices are seen far too seldom.

Many research findings on attitudes specifically related to physical activity for young people with disabilities are available, especially in the specialized journal *Adapted Physical Activity Quarterly*. Research findings are presented also in electronic formats by such vehicles as the EARAPA's (European regional IFAPA) onsite journal and the National Center on Physical Activity and Disability (NCPAD), a federally funded USA project located in Chicago, Illinois (www.ncpad.org and ncpad@uic.edu)

Constraints of Translation of Research into Action Pedagogy and of Dissemination

The body of knowledge that could underlie attitude change and other adapted physical activity strategies is developing faster than practitioners can be taught to use new principles and techniques. International bodies might commission panels of scholarly experts to translate research knowledge into practice and panels of excellent practitioners to field test the products of the research-oriented scholars. Requisite to the success of this project would be careful selection of panel members.

In general, practitioners throughout the world do not know best practices in regard to adaptations and supports for safe, successful physical activity. This is because they have had no specialized training in adapted physical activity or the training has been outdated or of poor quality because of the lack of knowledge of the staff conducting the training.

Constraints of Not Recognizing and Teaching Specific APA and Disability Sport Knowledge Base

Lack of training may also be caused by prejudice, discrimination, or ignorance with respect to awareness that a body of knowledge called adapted physical activity does exist with principles, theories, and practices to guide application of adaptation and supports in many services, environments, and contexts. Over 20 textbooks in adapted physical education/adapted physical activity, published and sold by commercial companies, existed by the early 1990s (DePauw & Sherrill, 1994). Several of these textbooks were subsequently translated into other languages, particularly in Asian countries. Translations have often incorporated many cultural adaptations and replaced photos to show children of the country for which the book is prepared. Because of cultural differences, it is doubtful that one or two textbooks could ever universally serve all countries.

Although originally textbooks came from USA sources, the European Master's Program published its own textbook in English (Van Coppenolle,) because the official language of the European Master's program was English. This textbook included chapters by several adapted physical activity experts representing different countries, thereby emphasizing the spirit of cooperation among the many countries which participate in the European Master's program (Van Coppenolle & De Potter, 2001;Van Coppenolle, Vanlandewijck, & Van de Vliet, 2001).

More recently countries around the world have been publishing adapted physical education/adapted physical activity textbooks written by their own leaders in their own language. Illustrative of these are outstanding adapted physical

activity books written primarily for use by Canadians (Steadward, Wheeler, & Watkinson, 2003) and Finnish people (Malkia & Rintala, 2002).

Specialized knowledge underlying adapted physical activity practice is also available in the proceedings of ISAPAs (e.g., Doll-Tepper et al., 1990; Dinold et al., 2003; Yabe et al., 1994) and in specialized books in specialized areas of adapted physical activity and/or persons with activity limitations (e.g., Cermak & Larkin, 2002; Reid, 1990). Yet, a constraint exists because many people throughout the world still do not know this body of knowledge exists or they diminish the stature of the body of knowledge, insisting that you teach persons with activity limitations in the same way that you teach others.

See reference lists in recent adapted physical activity textbooks for more information on the many sources that contribute to the knowledge base (e.g., Sherrill, 2004; Steadward et al., 2003).

Determinants

Determinants: Good Professional Preparation Enhances Participation of Young People

For young people with activity limitations to participate, there must be programs that welcome them and offer challenging recreational and competitive sport experiences. These programs should be diverse (some separate, some inclusive) so that individuals have choices of what best may meet their needs. For example, the extensive network of wheelchair basketball throughout the world is separate, but no competitor would trade his or her competitive experiences for an adapted game of stand-up ball in an inclusive setting. Paralympics, Special Olympics, and Deaflympics mostly feature separate programs. In contrast, school-based instructional, recreational, and competitive programs (especially in the Western world and Australia) seem to emphasize inclusive programs.

Regardless of whether services and programs are separate or inclusive, the quality depends on the commitment, enthusiasm, knowledge, and skill of the human resources. Thus, we return to personnel preparation and the descriptions of some practices that have worked.

Determinants: Federal Law

United States – Federal Legislation Funding University Specializations –1967 on

Originally, adapted physical education preparation began at the master's and doctor's levels, largely influenced by the faculty members who received federal grants to fund part or all of the development and administration of specialization areas. In the mid-1960s, qualified physical education university faculty representing several universities were selected (not sure by whom) to attend a workshop on how to write grants and mentored through the grant submission process. Subsequently, in 1969, ten universities began doctoral specializations in physical education for the disabled funded by Public Law 90-170. The major purpose of doctoral programs was to prepare teachers to be employed by universities to teach undergraduate and graduate courses in what later was called special physical education or adapted physical education .Supporting this purpose was knowledge that a law would soon be passed that would require physical education instruction for children with disabilities and the assumption that universities must assure that public school teachers would be ready. Master's programs began the same way, except that their purpose was to prepare future teachers to work directly with SEN children.

All universities could compete for federal grants (and in many states, for state grants), but economic constraints severely limited the number of universities that could be funded. Overall time, almost all universities have employed or retrained faculty to teach adapted physical education courses, with practica, to future teachers. Most universities require such courses. However, only a few universities have found the resources (grants and otherwise) to maintain specialization master's and doctoral degrees (e.g., Ohio State University, Texas Woman's University, Oregon State University, Indiana University).

Determinants: Advocacy Strategies

Illustrative Advocacy Organizations
National Consortium for Physical Education and Recreation for Individuals with Disabilities (NCPERID) – founded 1973 to monitor and guide funding agencies

Federal funding of universities in the adapted physical education area probably would not have endured over the years if a forward-looking group of physical educators and recreators (mostly grant directors) had not founded the NCPERID (current name) to advocate for high quality professional preparation and for funding that would continue to support personnel preparation needs (Johnson, 1986). During the first few years, NCPERID obtained funding to conduct

national and regional workshops in adapted physical education and therapeutic recreation (with AAHPERD and sometimes Special Olympics money). Representative members continue to work very closely with legislators and their aids in assuring that the words physical education were not omitted from each revision and amendment to the laws. In 1992, NCPERID (concerned about quality control of persons being employed to teach public school adapted physical education) obtained a federal grant to develop personnel preparation standards, a voluntary national examination, and a voluntary national certification process that would grant the CAPES initials to be written after the name of persons who met national standards (i.e., passed the national examination) just as nurses write RN and physicians write MD.

NCPERID (1995) standards, published in a 216-page book, now guide several administrations of the examination each year and a growing number of certified adapted physical educators. Fifteen areas of standards would be developed, with some standards specified for general physical education teachers and some for adapted physical education specialists. These areas were human development, motor behavior, exercise science, measurement and evaluation, history and philosophy, unique attributes of learners, curriculum and development, assessment, instructional design and planning, teaching, consultation and staff development, student and program evaluation, continuing education, ethics, communication. Each area includes information about needs of students with and without disabilities. The emphasis is on individual differences. It is hoped that the revision, which is underway, will adhere to WHO definitions and emphasize both personal and contextual factors.

The reason for the NCPERID-based general certification program was that few of the 50 state departments of education, over the years, agreed to regulate quality of teaching in the field by issuing separate teacher certificates in adapted physical education. Instead, many state departments and/or individual employers at local levels insisted that future adapted physical education teachers complete many credits in special education. Whereas university physical education departments mostly controlled adapted physical education personnel preparation, special education personnel mostly controlled adapted physical education employment, practices, and evaluation. When school districts could not find enough physical educators with adapted PE preparation, they often employed occupational and physical therapists to provide physical education to children with disabilities despite the fact that this practice was in violation of the law. Another quality control issue was that some school districts employed aides (paraprofessionals) with minimal preparation and thus low salaries to teach young people with disabilities in inclusive settings, but this teaching was often inferior and separate from that of the class.

Despite many problems, adapted physical education has emerged in the USA as a strong profession with many leaders determined to meet the needs of young persons with disabilities through services in both inclusive and separate settings (Kelly & Gansneder, 1988; Sherrill, 2004; Sherrill & DePauw, 1997). As societal needs have changed, adapted physical education roles have expanded to now include consultants employed by school districts to work directly with general physical educators and sports personnel. Consultants mostly provide continuing education to general physical educators and aides, but also team and dual teach (Lytle & Collier, 2002; Lytle & Hutchinson, 2004). Consultants also work with parents and provide family education with regard to leisure time use and the importance of physical activity.

Determinants: Crosscultural Cooperation and Collaboration

The European Model of Professional Preparation – the European Master Degree in Adapted Physical Activity (EMDAPA)
www.kuleuven.ac.be/thenapa/education/index.htm

In 1991, Herman Von Coppenolle, then President of the European Association for Research into Adapted Physical Activity (EARAPA), began to implement funding from the European Union to plan and conduct a cooperative master's program in which students and professors from many countries could participate (Van Coppenolle, Vanlandewijck, & Van de Vliet, 1993). By 1991, 30 universities were participating. Students began with 4 months at the Leuven University, Belgium, which was headquarters for the project. During the 4 months of orientation, students attended classes conducted by 24 professors from participating universities and 14 professors from Leuven University. The official language for the program was English. After 4 months of this general instruction, students selected a professor with whom he or she wished to work further with emphasis on practica, research, and the completion of a thesis.
By 2001, 200 students from Europe and the whole world had completed this outstanding program. The program, as it existed in 1991, is described by Van Coppenolle et al. (2003).

In 2004, EMDAPA's funding had increased so it could assertively recruit and fund master's level students from all over the world.

THENAPA – The European Network in Adapted Physical Activity (A Model for Cooperative Survey Research and the Facilitation of Inclusive Physical Activity)

www.kuleuven.ac.be/thenapa/adapt.htm

THENAPA, a project funded by the European Union from 1999 through 2004, awarded to Van Coppenolle of Belgium but implemented by professionals representing over 10 countries (Adomaitiene, 2003; Boursier & Kahrs, 2003; Dinold & Valkova, 2003; Van Coppenolle & De Potter, 2003).

This project might serve as a model for other countries to follow, particularly if funding could be made possible by WHO or WHO contacts.

First of all, a proposal was written after 1995, the date that the White Paper on European Social Policy "issues were transcribed into working objectives….The programme asserted the need for an active society for all, including people with disabilities. There was a series of initiatives, in particular aiming at taking the necessary steps to adopt the principles stated in the UN Standard Rules [1993, I haven't seen these] for creating equal opportunities for people with disabilities and to support introduction of a nondiscrimination clause in the EU Treaty" (Adomaitiene, 2003, p.21). The UN document that guided the EU supported participation in all areas of social life, including integrated education, recreation, and sport. This opened the way for funding specifically in physical activity for people with disability.

When funding was received, the following countries participated: Austria, Belgium, Bulgaria, Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Malta, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, the Netherlands, and United Kingdom. Tasks completed including a survey of the status quo concerning integration/inclusion of young people with disabilities in physical education and sport in these countries (reviewed earlier in this report); numerous forums for physical activity personnel to discuss personnel preparation, identify problems, and propose solutions; and the development and dissemination of ADAPT-CD-ROM, a multimedia tool for planning and implementing a curriculum and service provision in adapted physical activity. Out of these activities came a proposed revision of adapted physical education personnel preparation that many European countries are now addressing.

The THENAPA final report emphasizes that more specific legislation is needed by the European Union Commission [exact name of body not clear] to support physical education and sport for people with disabilities. THENAPA conceptualizes itself as an advocacy body with the obligation to now "ask the European Commission to demand from the Governments of Member States to create and approve legislation on the national level regarding the equal rights and opportunities of disabled in the areas of physical education, disability sport, and leisure activities of recreation of disabled" (Adomaitiene, 2003, p. 33).

It is clear that the UN and WHO need to support the initiative of individual countries that enact specific legislation that mentions physical education and recreation for people with disability as an essential right, opportunity, and vehicle for health and quality living. *One way that theUN and the WHO can do this is by modeling and always specifically mentioning "with disabilities" in their official documents.*

DEUAPA Model for Undergraduate University Students
Moving Toward a Common Curriculum for European Students With Different Languages

Diplome Europeene Universitaire en Activite Adaptee/European University Diploma for Adapted Physical Activity (DEUAPA), funded through the European Union, began in 1997/98 to meet the needs of upper level students enrolled in undergraduate (postsecondary school) sport science and physical education preparation. DEUAPA was created for future teachers who wish to prepare specifically for APA positions with direct teaching responsibilities with young people with disabilities. According to Bianco (2003), DEUAPA's intensive program "is about fundamental teaching of APA, and is held by specialists in different deficits. It will run for 5 weeks for a total of 175 hours (p. 212). In addition to this 5 weeks of instruction in French (with slides in English), students complete a hosted period of 3 months in an European country (and university) that offers a topic of their choice (e.g., intellectual disabilities, cardiac diseases, school integration). During this time students collect data for a thesis after which they return to a home university to write the thesis and pass examinations.

These three examples of collaborative/cooperative personnel preparation are only a few of the positive determinants that support adapted physical activity service delivery and empowerment. The program in each example might be improved by recruiting faculty and students with disabilities.

Other determinants relate to all of the variables associated with eliminating prejudice, discrimination, and oppression. Each time an architectural barrier to a play space or sport facility is eliminated, this becomes a determinant. Each time, neighbors agree to "be exercise and sport partners" with persons who ordinarily do not have such supports, this is a determinant.

Selected Initiatives

Individually conceptualized and conducted published surveys in several countries have generated hard data that respondents believe *the greatest need is personnel preparation* (e.g., Dinold & Valkova, 2003; Lin, 2003). To meet this and other needs and to execute initiatives, funding is needed.

Initiatives are described throughout this report (no need for repetition), so only a few needs and trends are included in this section.

Funding

Therefore, a high priority initiative might be an international commission (or some group) to identify concrete sources where money is available and to train carefully selected leaders and potential leaders on the many ways to obtain such money (e.g., grant identification and writing, infusion into business and industry and into places and times where subtle and direct decisions about money are made, specific communication strategies with different kinds of people responsible for different sources of money).

Continuing Education for Families and Employed Personnel

Personnel preparation should include all kinds of *continuing education for parents and for employed personnel* in general education and mainstream community settings who, increasingly, are expected to deliver high quality services and to facilitate empowerment of people with disabilities of all ages. There is a trend toward recognizing that families gain much information as they raise their own children with disabilities and should be used as resources to school and community agencies and programs. The USA law requires that parents be involved in planning the individualized education programs (IEPs) of their children and IEPs cannot be implemented without the signatures of parents. Thus parents need continuing education of the same kind as many teachers.

Education for Persons Entering Adapted Physical Activity Professions

Minimum standards and competencies to be met for persons planning on entering adapted physical activity service delivery/empowerment professions should be addressed in international conferences. As time goes on, accreditation of university and agency programs may be necessary. Scholarships and grants to train persons who agree to work in "needy" countries must also be addressed because obviously the regions which need adapted physical services the most seldom have resources.

.

Resources

International help is needed in identifying and maximizing resources.
Government-funded and private-funded organizations (as well as nonprofit organizations) must also increasingly sponsor diverse forms of parent, family, and professional advocacy and training. Some countries support professional organizations as vehicles for certification, endorsement, and other recognitions of quality abilities and practices (e.g, the Australian Sport Commission's initiatives in certifying various levels of coaching athletes with disabilities and the National Consortium for Physical Education and Recreation for Individuals with Disabilities' (NCPERID's) national voluntary certification examinations in the USA). Special Olympics International (www.specialolympics.org) is an example of a private-funded organization that organizes numerous initiatives (see *Spirit*, Fall 2003, or any issue). Other disability sport organizations also fund initiatives, but do not follow through with sufficient information dissemination to be well known.

An excellent source to learn about disability sport initiatives is *The Paralympian: Newsletter of the International Paralympic Committee* (www.paralympic.org or info@paralympic.org

Key Proposals for Increasing Participation and Facilitating Change

The history and outcomes of several key proposals of the past were described in the section on Status Quo. It is recommended that these key proposals, described because they have largely successful, be exported, with cultural adaptation and financial help, to countries identified as most needing help in the area of physical activity for young people with disabilities. Identification of countries needing the most help (or perhaps perceived as best able to benefit from help) seems to be the task of an international body like WHO or an international organization funded and monitored by WHO.

Relating to physical education, these include enactment of law, adoption of human rights policy, personnel preparation, widespread dissemination of inclusion curricula, establishment of government agencies to guide

innovation and make funding choices, creation of professional advocacy organizations to monitor funding agencies, etc. Proposals must state specifically *physical education for young people with activity limitations (or disabilities)* rather than the generic and idealistic term*, physical education for all.* There must be no misunderstanding concerning what is meant when proposals are developed. *Physical education* must be defined. *Physical activity* must be defined. *Young people with activity limitations (or disabilities*) must be defined. It must be made absolutely clear that all young people with activity limitations are to benefit from a law, policy, or curriculum ….not just those with mild or moderate difficulties. Penalties for not complying with law and policy or effectively using curricula should be written with procedures for enforcement. Praise and recognition mechanisms should also be in place.

Human Resources, Including Involvement of Adult Athletes with Disabilities

Most IFAPA regions have experienced success (although sometimes small and slow) in whatever proposals their countries have developed and are implementing. In most locations, the greatest need is a larger number of committed human beings with high levels of personal motivation, energy, and resources (monetary and otherwise). Many adapted physical activity professionals have long used their personal money to develop programs, conduct instruction, sponsor or support young promising professionals, participate in conferences, and conduct research. Probably no other group of professionals demonstrate the degree of commitment that adapted physical activity people do, but inevitably burnout is high and few leaders can continue at the necessary pace without realizing huge family and other sacrifices.

Recruitment and training must therefore be a major focus of new key proposals. Promising young leaders must be identified in as many countries as possible and mentored carefully by existing leaders, including those who are retired or retiring soon from salaried job. Systematic evaluation models (tested, when possible, by research) need to be developed for assessing leadership development, and new leaders should be provided with many sources of encouragement and recognition. Whenever international conferences and symposia are conducted, established leaders should be required to bring along and involve promising leaders to assure a strong future for work that needs to be done.

Among the new leaders should be adults with all kinds of disabilities who have completed university degrees comparable to those of other leaders. Comparable does not mean the same; degree and certification requirements may have to be adapted and special supports provided. Paralympic athletes (especially those who are retired) are one excellent source of promising professional leaders (Wheeler, Malone, VanVlack, Nelson, & Steadward, 1996; Wheeler, Steadward, Legg, Hutzler, Campbell, & Johnson, 1999). Wheeler and colleagues provide outstanding research (some international) on elite disability sport participants with suggestions on helping retired athletes to assume the highest possible productivity in training and leading others.

Conferences, Workshops, Etc.

Conferences on physical activity for people with disability, in the future, should have people with disabilities as speakers and discussion leaders as well as audience. Architectural, attitudinal, and aspirational barriers should be addressed as conferences are planned and conducted. A concerted effort should be made to have at least a 10-50% sample of people with disabilities involved, depending on age groups targeted. It should be remembered that well over 50% of the population over 70 have disabilities. *United Nations and World Health Organization (WHO) committees and meetings should adopt guidelines that assure these practices so that decision-making is no longer controlled by predominantly able-bodied persons.*

Models

Young people with disabilities should have many opportunities to view female and male models of all ages with disabilities similar to their own (e.g., Driscoll, J., 2000; Hankins, 2003). It is especially important that they see persons of all ages and disabilities engaging in regular daily physical activity and that they see accessible, inviting facilities for physical activity in their own neighborhoods and/or have free or inexpensive transportation to physical activity sites. See magazine called *Sports 'N Spokes* that households and community centers should have. This should be done through the renovation of neighborhoods and community structures, careful control of new facilities, and by as much media as possible. In particular, outdoor areas should be safe, accessible, with clean air, and ample protection from the sun and rain. In war-torn and disease-infected countries, international money may be directed toward construction of model physical activity areas … for without models, how can people dream and plan? In areas where migrating or immigrating people (or war prisons) are forced to congregate, there should be planned recreational physical activity and space allocated to physical activity, as a life necessity, not merely a pleasure.

With the steadily increasing lifespan making an impact on society, young people need to see society helping old people to live high quality lives. People over 70 (especially the frail elderly) should be targeted for adapted physical activity as much as younger people and especially need well prepared professionals to conduct free, appropriate

activities in private homes, community centers, and assisted living facilities. As people live longer (increasingly into the 100s), satisfying, fun, healthy physical activity must be provided to assure quality of life.

References

The writer apologizes that accent marks and other symbols are missing from personal names.

Adomaitiene, R. (2003). European Union policy with respect to the non-discrimination and social integration of people with a disability through physical activity. In Van Coppenole, De Potter, Van Peteghem, Djobova, & Wijns (Eds.). Inclusion and integration through adapted physical activity (pp. 17-36). Leuven, Belgium: Thematic Network Educational and Social Integration of Persons with a Disability through Adapted Physical Activity (THENAPA).

Australian Sports Commission (ASC, 1900s onward). Willing and Able series. Also Give It a Go (2001) and other personnel preparation materials. Belconnen ACT: Australian Sports Commission. pubs@ausport.gov.au

Barnes, C. (1991). Disabled people in Britain and discrimination: A case for anti-discrimination legislation. London: Hurst and Co.

Bianco, A. (2003.). DEUAPA –European University diploma in adapted physical activity –"ERASMUS CDI" in M. Dinold, G.Gerber, & T. Reinert (Eds.). 13th ISAPA Proceedings, 2001, Vienna, Austria (pp. 210-213). Vienna, Austria: Austrian Federation of Adapted Physical Activity.

Block, M.E, (2000). A teacher's guide to including students with disabilities in general physical education (2nd ed.). Baltimore: Brookes. First ed., 1994.

Block, M.E. (1999). Did we jump on the wrong bandwagon? Problems with inclusion in physical education. Palaestra, 15 (3), 30-36, 55.

Castenada, L., & Sherrill, C. (1999). Family participation in challenger baseball: Critical theory perspectives. Adapted Physical Activity Quarterly, 16, 372-388.

Cermak, S.A. & Larkin, D. (Eds.). (2002). Developmental coordination disorder. Albany, NY: Delmar.

Charlton, J.I. (1998). Nothing about us without us: Disability oppression and empowerment. Berkeley, CA: University of California Press.

Decker, J. & Jansma, P. (1995). Physical education least restrictive environment continua used in the United States: Report based on federal grant findings, 1990, primary investigator, P. Jansma. Adapted Physical Activity Quarterly, 12, 124-138.

Chow, B.C. & Sit, C. (Eds.) (2003). Proceedings: Seventh International Symposium of Asian Society for Adapted Physical Education and Exercise, Hong Kong, August 7-9, 2002.

De Knop, P. & Oja, P. (1996). Sport for all. (pp. 15-43). Current issues of sport science (pp. 15-43). In ICSSPE Sport Science Studies, 8.

DePauw, K.P. (1986). Horseback riding for individuals with disabilities: Programs, philosophy, and research. Adapted Physical Activity Quarterly, 3, 217-226.

DePauw, K.P. & Sherrill, C. (1994). Adapted physical activity: Present and future. Physical Education Review, 17, 6-13.

DePauw, K.P. & Gavron, S. (1995). Disability and sport. Champaign, IL: Human Kinetics.

DePauw, K.P. & Doll-Tepper, G. (2000). Toward progressive inclusion and acceptance: Myth or reality? The inclusion debate and bandwagon discourse. Adapted Physical Activity Quarterly, 17, 135-143.

De Potter, J.C. (1994). Adapted physical activity in African countries. Physical Education Review, 17, 68-74.

DePotter, J.C., Van Coppenolle, H., Van Peteghem, A., Djobova, S. & Wijns (Eds.). (2003). Vocational training in adapted physical activity. Leuven, Belgium: THENAPA.

Dinold, M. & Valkova, H. (2003). Inclusion in physical education in school. In Van Coppenolle et al. (Eds). Inclusion and integration through adapted physical activity (pp. 47-74.). Leuven, Belgium: THENAPA

Dinold, M., Gerber, G. & Reinelt, T. (2003). Towards a society for all --through adapted physical activity. 13th ISAPA, July 3-5, 2001, Vienna, Austria. Vienna: Austrian Federation of Adapted Physical Activity.

Doll-Tepper, G., Dahms, C., Doll, B. & von Selzam, H. (Eds.). (1990). Adapted physical activity: An interdisciplinary approach. Proceedings of the 7th ISAPA, Berlin, June 1989. Berlin: Springer-Verlag.

Doll-Tepper, G., Scoretz, D. & Tiemann, H. (1995). Women in disability sport: Current cross-cultural perspectives and future directions. In H. Van Coppenolle, Y, Vanlandewijck, P. Van de Vliet & J. Simons (Eds.). Second European Conference on Adapted Physical Activity and Sports: Health, Well-Being and Employment (pp. 237-240). Leuven, Belgium: Acco.

Doll-Tepper, G. (2003). Adapted physical activity –Developments and challenges from an international perspective. In M. Dinold, G. Gerber, & T. Reinelt (Eds.). 13th ISAPA Proceedings, Vienna, Austria, 2001. (pp. 29-36). Vienna, Austria: Australian Federation of Adapted Physical Activity.

Driscoll, J. (2000). Determined to win. New York: Barnes and Noble.

Eason, R.T., Smith, T. L. & Caron, F. (Eds.). (1983). Adapted physical activity: From theory to application: Proceedings, Third International Symposium on Adapted Physical Activity (ISAPA), November 1981, New Orleans, LA, USA. Champaign, IL: Human Kinetics.

Hankins, G.W. (2003). Rolling on: The story of the amazing Gary McPherson. Edmonton, Canada: University of Alberta Press.

Heikinaro-Johansson, P., Sherrill, C., French, R. & Huuhka (1995). Adapted physical education consultant model to facilitate integration. Adapted Physical Activity Quarterly, 12, 12-33.

Heller, T., Hsieh, K. & Rimmer, J.H. (2004). Attitudinal and psychological outcomes of a fitness and health education program on adults with Down syndrome. American Journal on Mental Retardation, 109, 175-185.

Hunt, C.P. (2003). 1.2 million and counting: Special Olympics athlete participation summary. Spirit: The Magazine of Special Olympics, 9 (4), 22-23. See www.specialolympics.org

Hutzler, Y., Flies, O., Chacham, A. & Van den Auweele, Y. (2002). Perspectives of children with physical disabilities on inclusion and empowerment: Supporting and limiting factors. Adapted Physical Activity Quarterly, 19, 300-317.

Johnson, L.E. (1986). The need for a national consortium. Adapted Physical Activity Quarterly, 3, 144-146.

Kelly, L.E. & Gansneder, B. (1988). Preparation and job demographics of adapted physical educators in the United States. Adapted Physical Activity Quarterly, 15, 141-154.

Kiphard, E. (1983). Adapted physical education in Germany. In R. T. Eason, T. L. Smith, & F. Caron (Eds.). Adapted physical activity: Third ISAPA Proceedings (pp. 25-32). Champaign, IL:Human Kinetics.

Kolo, I.A. (1995). Fostering integration in community-based rehabilitation programmes by adapting indigenous African games for disabled persons. In I. Morisbak & P. E. Jorgensen (Eds.) Adapted physical activity: Proceedings, third ISAPA (pp. 80-88). Omslag, Norway: BB Grafisk.

Kozub, F.M. & Lienert, C. (2003). Attitudes toward children teaching children with disabilities: Review of literature and research paradigm. Adapted Physical Activity Quarterly, 20, 323-346.

Kudlacek, M., Valkova, H., Sherrill, C., Myers, B. & French, R. (2002). An inclusion instrument based on planned behavior theory for prospective physical educators. Adapted Physical Activity Quarterly, 19, 280-299.

Krotoski, D.M., Nosek, M.A. & Turk, M.A (Eds.). (1996). Women with physical disabilities: Achieving and maintaining health and well-being. Baltimore: Brookes.

Leavitt, R.L. (Ed.). (1999). Cross-cultural rehabilitation: An international perspective. Philadelphia: W. B. Saunders.

Morisbak, I. & Jorgensen, P.E. (Eds.). .Quality of life through adapted physical activity, a lifespan concept: 10th ISAPA, May 22-26, 1995, Oslo & Beitostolen, Norway. Omslag, Norway: BB Grafisk.

Lin, M-H. (1999). Issues of developing sport activities for disabled people in Taiwan. In H. Nakata (Ed.). Adapted physical activity: Self-actualization through physical activity (pp. 17-24). Fujisawa, Japan: Shonan Shuppansha Co.

Lin, M-H (2003). The qualification and training system for adapted physical activities in North East Asia. In B.C. Chow & C. H. P. Sit (Eds.). Proceedings, 7th symposium of ASAPE, Hong Kong, August, 2002 (pp. 50-59).

Longmuir, P.E. & Bar-Or, O. (2000).Factors influencing the physical activity levels of youths with physical and sensory disabilities. Adapted Physical Activity Quarterly, 17, 40-53.

Lytle, R.K. & Collier, D. (2002). The consultation process: Adapted physical education specialists' perceptions. Adapted Physical Activity Quarterly, 19, 261-279.

Lytle, R.K. & Hutchinson, G.E. (2004). Adapted physical educators: The multiple roles of consultants. Adapted Physical Activity Quarterly, 21, 34-49.

Lyons, R.F., Taylor, B. & Langille, L.L. (2003). Policy strategies to foster active living. In R. D. Steadward, G. D. Wheeler, & E. J. Watkinson (Eds.).Adapted physical activity. Edmonton, Canada: The University of Alberta Press.

Malkia, E. & Rintala, P. (2002). Uusi Erityisliikunta: Liikunnan sovellukset erityisryhmille. Helsinki: Liikuntatieteellisen Seuran julkaisu nro.

Mactavish, J.B. & Dowds, M.J. (2003). Physical activity and sport for individuals with intellectual disability. In R. D. Steadward, G. D. Wheeler, & E. J. Watkinson (Eds.). Adapted physical activity (pp. 559-587). Edmonton, Canada: The University of Alberta Press.

McKenzie, R.T. (1909). Exercise in education and medicine. Philadelphia: Saunders.

Nakata, H. (Ed.) (1999). Adapted physical activity: Self-actualization through physical activity. Proceedings of the 5th International Congress of the Asian Society for Adapted Physical Education and Exercise (ASAPE). Fujisawa, Japan: Shonan Shuppansha Co.

National Consortium for Physical Education and Recreation for Individuals with Disabilities (NCPERID). Kelly, L.E. (Ed.). (1995). Adapted physical education national standards. Champaign, IL: Human Kinetics.

National Women's Studies Association Journal (2002). Special Issue, Feminist disability studies, 14 (3), 1-230.

Norins, J., Siperstein, G.N., Evangelista, D. & Corbin, S.B. (2003). Roadblocks on the way to inclusion. Spirit, 9, (4), 16-17.

Oliver, M. (1990). The politics of disablement. London: Macmillan.

Reid, G. (Ed.). (1990). Problems in movement control. Amsterdam: North-Holland.

Reid, G. (2003). Defining adapted physical activity. In R.D. Steadward, G.D. Wheeler & E.J. Watkinson (Eds.). Adapted physical activity (pp. 11-26). Edmonton, Canada: The University of Alberta Press.

Reid, G. & Ulrich, D.A. (2001). The impact factor and APAQ. Adapted Physical Activity Quarterly, 18, 119-126.

Sit, C.H.P., Lindner, K.J. & Sherrill, C. (2002). Sport participation of Hong Kong children with disabilities in special schools. Adapted Physical Activity Quarterly, 19, 453-434.

Sherrill, C. (1976). Adapted physical education and recreation: A multidisciplinary approach. Dubuque, IA: Wm. C. Brown.

Sherrill, C. (Ed.).(1988). Leadership training in adapted physical education. Champaign, IL: Human Kinetics.

Sherrill, C. (1993). Adapted physical activity, recreation, and sport: Crossdisciplinary and lifespan (4th ed.). Dubuque, IA: Wm. C. Brown.

Sherrill, C. (2004). Adapted physical activity, recreation, and sport: Crossdisciplinary and lifespan (6th ed.). Boston: McGraw Hill.

Sherrill, C. & DePauw, K.P. (1977). Adapted physical activity and education. In J. D. Massengale & R. A. Swanson (Eds.). The history of exercise and sport science. (pp. 39-108). Champaign, IL: Human Kinetics.

Smallwood, K. (2003). Sport: The universal language. Spirit, 9 (4), 6-11.

Sociology of Sport Journal (2001). Special Issue, The sociology of ability and disability in physical activity, 18, 1-135.

Steadward, R.D., Nelson, E. & Wheeler, G.D. (Eds). (1994). Vista '93 --The outlook: Proceedings, May 14-20, 1993. Edmonton, Canada: Rick Hansen Centre.

Steadward, R.D., Wheeler, G.D. & Watkinson, E.J. (Eds). (2003). Adapted physical activity. Edmonton, Canada: The University of Alberta Press.

Stein, J.U. (2004). Adapted physical activity: The golden years. Palaestra, 20, 26-29, 56.

Stewart, D.A. (1991). Deaf sport: The impact of sport within the Deaf community. Washington, DC: Gallaudet University Press.

Temple, V.A. & Walkley, J.W. (1999). Academic learning time -- Physical eduation (ALT-PE) of students with mild intellectual disabilities in regular Victorian schools. Adapted Physical Activity Quarterly, 16, 64-74.

Theodorakis, Y., Bagiatis, K. & Goudas, M. (1995). Attitudes toward teaching individuals with disabilities: Application of planned behavior theory. Adapted Physical Activity Quarterly, 12, 151-160.

Ustun, B.T. (2003). WHO's international classification of functioning, disability and health (ICF). In M. Dinold, G. Gerber, & T, Reinelt (Eds). 13th ISAPA Proceedings, July 3-7, 2001. (pp. 71-77). Vienna: Austrian Federation of Adapted Physical Activity.

Valkova, H. (2003). History and development [of EARAPA and THENAPA]. In H. Van Coppenolle et al. (Eds). Inclusion and integration through adapted physical activity (pp. 9-15). Leuven, Belgium: THENAPA.

Van Coppenolle, H. & De Potter, J.C. (2003). Dissemination of the results of the European Thematic Network APA in the Domains of intergration and training of professionals. In M. Dinold, G. Gerber & T. Reinelt (Eds.). 13th ISAPA Proceedings, Vienna, Austria, 2001 (pp. 207-209). Vienna, Austria: Austrian Federation of Adapted Physical Activity.

Van Coppenolle, H., Vanlandewijck, Y. & Van de Vliet, P. (2003). The renewed program of the European master in adapted physical activity. In M. Dinold, G. Gerber & T. Reinelt (Eds.). 13th ISAPA Proceedings, Vienna, Austria, 2001 (pp. 205-206). Vienna, Austria: Austrian Federation of Adapted Physical Activity.

Van Coppenolle, H., De Potter, J.C., Van Peteghem, A., Djobova, S. & Wijns (Eds). (2003). Inclusion and integration through adapted physical activity. Leuven, Belgium: Thematic Network Educational and Social Integration of Persons with a Disability through Adapted Physical Activity (THENAPA).

Vogler, E.W., Koranda, P. & Romance, T. (2000). Including a child with severe cerebral palsy in physical education: A case study. Adapted Physical Activity Quarterly, 17, 161-175.

Wall, A.E. (Ed.). (2003). The history of adapted physical activity in Canada. In R.D. Steadward, G.D. Wheeler & E.J. Watkinson (Eds). Adapted physical activity (pp. 28-43). Edmonton, Canada: The University of Alberta Press.

Wheeler, G.D., Malone, L.A., Van Vlack, S., Nelson, E.R. & Steadward, R.D. (1996). Retirement from disability sport: A pilot study. Adapted Physical Activity Quarterly, 13, 382-399.

Wheeler, G.D., Steadward, R.D., Legg, D., Hutzler, Y., Campbell, E. & Johnson, A. (1999). Personal investment in disability sport careers: An international study. Adapted Physical Activity Quarterly, 16, 219-237.

Winnick, J. (Ed.). Adapted physical education and sport (3rd ed.).Champaign, IL: Human Kinetics.

World Health Organization (2001). International classification of functioning, disability, and health (ICF). Geneva: Switzerland: Author.

Yabe, K. & Hong, Y.J. (1994). Adapted physical education, health, and fitness in Asian countries. Physical Education Review, 17, 58-67.

Yabe, K., Kusano, K. & Nakata, H. (Eds.). (1994). Proceedings: 9th ISAPA, Yokohama, Japan, August 4-7, Adapted physical activity: Health and fitness. Tokyo: Springer-Verlag.