# **Special Article**

# Adapted physical education in the Hungarian educational system: a conceptual framework

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#### ABSTRACT

Simon I, Fügedi B, Bognár J. Adapted physical education in the Hungarian educational system: a conceptual framework. J. Hum. Sport Exerc. Vol. 5, No. 3, pp. 453-461, 2010. Declining health status of youth assumes considerable proportions. The continuously growing number of children with bad body positions, overweight and obesity, diabetes and asthma has been subject to several national or international publications. The number of state surveys, assessments of the situation and action plans has been arising, but real action has been keeping us waiting. Hungary, as a unique country among the neighboring countries, has realized the school-integrated rehabilitation of children suffering from internal and locomotor disorders. Schools in Hungary the Adapted Physical Education (APE), as a part of Physical Education (PE) have been helping disabled children finding their way back to their healthy fellows. In this case study we would like to present the interpretation of the definition, the goals and tasks of APE how and in what way they differ from the European approach and also introduce the definitions are used in Hungarian educational terminology (Physiotherapy, PE, Light Physical Education – as LPE and APE). We consider it to be important to show those substantial points which fundamentally differentiate Physiotherapy, APE and LPE. With setting the goals and tasks we would like to make it clear, that APE is an integral part of PE as a school subject in Hungary. That is the reason why with setting the fundamental goals and tasks, the goals and tasks of PE have to be considered as a starting-point. Compared to international publications a wider interpretation of APE in our study also provides an opportunity to establish an integral European way of thinking. Key words: PHYSICAL EDUCATION, ADAPTED PHYSICAL EDUCATION, EDUCATIONAL SYSTEM.

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# INTRODUCTION

#### International review

Rows of case analysises and action plans have been elaborated by the Hungarian Ministry for Health and Education ("Our common treasure the Child", National Health Programme, Cola and sugarfree buffees etc.), in which they highlight the importance of screening and physical education, but none of these are either appliable or realistic. Where at the same time in Hungary a very special form of PE – unlike in the European countries – has been present at schools since 1915 is Adapted Physical Education (APE) establishing integration. Rather as a synonime to Physiotherapy in the neighboring countries the definition of APA (Adapted Physical Activity) has been applied in a most narrowed way, mainly as a site of the Physical Education or rehabilitation of handicapped or disabled people (Divišová et al., 2007; Hutzler & Sherrill, 2007; Stanescu et al., 2007; Winnick, 2005). Today, physical activity and sports for participants with functional limitations and activity restrictions are increasingly being referred to within the framework of Adapted Physical Activity –APA (Steadward et al., 2003; Winnick, 2005), Paralympics (Higgs & Vanlandewijck, 2007), Special Olympics (Farrell et al., 2004; Shapiro, 2003), health promotion (Riley et al., 2008), and rehabilitation medicine (Roe et al., 2008).

The modern evolution of physical activity and sports as an active means of rehabilitation is attributed, among others, to the Swedish scholar Per Henrik Ling, who established in the 19th century a system of medical gymnastics in the University of Stockholm, Sweden (Hutzler, 2008).

The term medical gymnastics was later transferred to other European and to American institutions of both medical and educational sciences, but was not accepted (Hutzler, 2008). It was transformed in the USA into Corrective Gymnastics and later Sports for the handicapped, Special Physical Education (Dunn & Leitschuh, 2005); Adapted Physical Education (e.g., Winnick, 2005), and ultimately Adapted Physical Activity - APA (Reid, 2003). Following initial generation by French Canadian scholars in the late 1970's, the term APA soon became the internationally accepted umbrella for conceptualizing, conducting and implementing physical activities suitable for persons with disabilities (Hutzler & Sherrill, 2007).

Contrary to these in Hungary the health rehabilitation for the majority of the same category of children has been performed by schools as educational task. It is only with serious cases when hospital therapeutic gymnastics (Physiotherapy) are necessary. The decreasing health status of the youth, the insufficient state pledge of function make sense considering the increasing number of those advised to school APE and the increasing importance of PE. Only modern PE or APE owning up-to-date attitudes can live up to and perform this challenge.

Renewing PE, either performance, evaluation, (Bucsy & Katona, 2006; Doll-Tepper, 1997; Hamar, 1999; Makszin, 2005; Oláh & Makszin, 2005;), or pedagogy (Gombocz, 2005; Ekler, 2005; Kulinna & Cothran, 2003; Lund & Tannehill, 2005; Rétsági, 2004; Robazza et al., 2006; Szatmári, 2004) a lots of publications appeared which reconsider the intellectual background of PE as a subject and also consider the demands of our age have been issued.

An altered approach which is according to the social demands of our age has appeared also in the books and publications of teacher training institutes - P.E.T.E and A.P.E.T.E - (Bucsy & Katona, 2006; Makszin, 2002; Prisztóka, 1998; Zakrajsek et al., 2003). This process of renewing has unfortunately affected only partially APE. In this scientific field we hardly meet any international publications, whereas Hungarian

publications rather concentrate on publishing the exercise of APE (Bencze, 1995; Donáthné, 2004; Érdi-Krausz, 1996) but do not pay attention to actualizing definitions, goals and tasks.

The aim of our paper is to clear and reconsider definitions, goals and tasks are used in Hungary in PE and APE. We hope the method can be inserted internationally and be an efficient sample for educators and policy-makers.

# Definition of Adapted Physical Education

The view is almost consistent with the major components included in the International Classification of Functioning, Disability and Health (ICF: WHO 2001) accepted among rehabilitation services worldwide (Table 1).

ICF Category	Sport Science Categories	Significance to participant	Service provider, level; track accent	Examples of activity goals
Body structure	System: cardio respiratory Joints, neuromuscular, neurological	Have physical foundation & acceptable appearance	APA specialist; accent on rehabilitation (European perspective) co-working with therapists	Reduce weight; align posture; Increase bone density; Increase muscle mass
Body function	Abilities: Aerobic and anaerobic endurance, Muscle strength and endurance, Joint flexibility, Psychological traits	Be able to perform	APA specialist; accent on rehabilitation (European perspective). In USA, this could be a rehabilitation fitness instructor co- working with therapists	Restore range of motion; increase muscle strength and power; increase lung & cardiovascular function; increase energy efficiency
Activity or task performance, related to physical activity	Skills: Fundamental motor skills, Sport specific skills, Psychological skills	Doing meaningful tasks	APA specialist co-working with teacher / instructor / coach, each with additional APA knowledge and or professional support; accent on education, recreation, & sport	Reach for the ball; finish 10 laps in swimming; maintain position; cross the road; enter a bus
Participation in physical activity	Tactics and Strategies; Academic learning time; floor time.	Being accepted as part of a reference group	APA specialist co-working with therapist / teacher / social worker / psychologist / important significant others; accent on education & recreation	Participate in ball games; be assertive; be accepted among peers; achieve leadership; compete; assume responsibility
Elimination of barriers to goal achievement	Advocacy; Social support systems	Having no restrictions, or opposition to participation (Equity)	APA practitioner across levels together with social worker, volunteer community activist; accent on recreation & sport	Change attitudes, set rules for; use law and affirmative action

**Table 1.** Description of APA terms and service delivery by ICF and Sport Science categories (Adapted from Hutzler & Sherrill, 2007).

However, the interpretation of the definition internationally shows a little difference somewhat from that used in Hungary. The levels, goals and tasks of methods are differing on the different scenery of working with individuals with disability in our country. Three levels can be differentiated except PE, these are: Physiotherapy, Light Physical Education, Adapted Physical Education. Meanwhile in Europe definitions are Physiotherapy, Adapted Physical Activity and normal PE.

As a starting point for the definition we should serve Punyi's (1959) definition "Adapted Physical Education is an educational process, which displays its effect in curing and preventing disabilities" (p12). According Gárdos and Mónus (1991) is "Adapted Physical Education a scientific field which - using the methods of Physical Education – is capable of curing and preventing disabilities. Adapted Physical Education as a part of Physical Education or that of Sports Sciences integrates all kind of knowledge and information into a system, which serve restoring health status, applying the methods and tools of Sport and Physical Education." (p21).

Functioning is relation to pedagogy as a science has also to be focused, due to the social environment which has changed a lot recently and has been changing continuously. Due to the above mentioned, the relationship between APE and Pedagogy (tutored – tutor, tutor – parent, school – parent respectively, appraisement of the principle of equality of chances) has to become closer than ever. Among the definitions used as a starting point, Punyi (1959) emphasizes the pedagogical character, and indicates no relation to sports sciences. Gárdos and Mónus (1991) refer to restoring health status instead of curing. It defines the exact position APE takes within the system of sciences. Unfortunately any references to educational processes are missing from this almost complete definition, whereas education would be an important part of it.

We consider complexity and social demands and would state the definition of APE as following: Adapted Physical Education is an educational process, which – as a basic category of sports sciences – using the tools and methods of Physical Education displays its effect best both in the prevention of diseases (secondary prevention) and restoring health status and performance up to a most extended proportion.

To understand the difference among the levels of working individuals with disabilities the definition of Physiotherapy should be given. Physiotherapy (physical therapy) is a health service, where the main goals are reaching a maximum on motoric extent, keeping and restoring the standard of functional abilities (WCPA, 1995). Both international and national literature quite often uses the expression kinesiology as well (Gergely, 2000; Makszin, 2005; Riley et al., 2008; Winnick, 2005).

Table 2 summarizes everything that has happened so fare. Extended by a few elements, we would like to present the common and different characteristics of Adapted Physical Education and Physiotherapy.

Light Physical Education (Table 3) which symbolizes a bridge between Adapted Physical Education and Physiotherapy, connects to the above mentioned definitions. Determining this definition is already important if we consider this type of integrated Physical Education, which is unknown in the European teaching practice of Physical Education.

Light Physical Education is a PE category, in which pupils with contemporary or longterm negative performance in their body status, try to restore their performance with differentiated body-training where they do not perform the contraindicated exercises. Carried out and connected on normal PE lessons (Gárdos & Mónus, 1991).

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Ada	pted Physical	Education		Phys	iother	ару	
		Sir	nilarities				

**Table 2.** Comparison of Adapted Physical Education and Physiotherapy

Adapted Physical Education	FilySlotherapy		
Similarities			
Restoring, maintaining of health	Restoring, maintaining of health		
Secondary prevention	Secondary prevention		
Differences			
Goal is to restore efficiency	Goal is the restoring of function		
Educational tasks	Health oriented tasks		
5-16 persons group/team work	1-5 persons group/team work		
Correction of mild changes	Correction of severe changes		
General and appropriate developing of muscles	Appropriate developing of muscles		

Adapted Physical Education (APE)	Light Physical Education (LPE)			
Similarities				
Restoring, maintaining of health	Restoring, maintaining of health			
Secondary prevention	Secondary prevention			
Restoring one's efficiency	Restoring one's efficiency			
Differences				
Correction exercises dominate	Ignoring contraindicated exercises			
Separate term from PE lessons	Part of PE lesson, same term			
Separate from classmates	Integrated with the classmates			
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## Goals and Tasks of APE

Adapted Physical Education is a special type of Physical Education, as such when defining its goals and tasks to perform goals and tasks of PE should be taken as a basis. The goal of PE - as a vital part of the unified line of tasks within didactic and education work - is to contribute to the forming of students' positive personality as an integrated affect of nature's health developing impact. To perform this goal, both tools and methods of body culture have to be applied, such as physical exercises, motor games, sporting activities and connecting intellectual knowledge (Hungarian Frame Syllabus, 2000). Further goals are:

- 1. prevention illuminating all mental damages, which can affect pupils during school and everyday activities, to perform this:
- 2. supporting pupils' healthy body development,
- 3. developing of conditional and coordinational basic skills,

- 4. developing of motoric skills, motoric culture,
- 5. developing of safety of acting,
- 6. developing of claims for exercising doing sports, further developing of claims for competing and playing games.

Summing up the above mentioned goal of Adapted Physical Education is considering the aspects of Physical Education is to restore performance and health status of pupils with altered health status to the greatest possible extent. Further it is also important to convince them of liking regular physical exercises, to include these into their everyday life, to grant them a chance for a quality life. Carried out in educational process.

Performing the determined goals gives numerous tasks. These tasks can be divided into general and special fields of interest. General tasks are identical to educative tasks. In line with the tasks of PE special tasks can be determined extending PE tasks as following:

- 1. Proportional, multiple and general training of the body restoring the health status, performance, supporting the body development:
  - Restoring and developing of organs and organ systems, restoring, developing of the functional characteristica of organs and organ systems, restoring, developing of performance of organs or organic systems;
  - Restoring of natural or acquired deformities;
  - Secondary prevention;
  - Proportional and versatile training and developing of lower and upper limb muscles of the trunk;
  - Proportional training and stretching of altered musculature;
- 2. Developing of motor skills:
  - Among contraindicated abilities developing strength and endurance. With endurance we mean short term or long term. Whereas, among the types of power, power-endurance and in a most restricted field developing the maximum of power. To protect joints and spine we can perform power developing exercises in relieved positions only.
  - To gain proper and economic technical performance, developing coordination abilities is required. This has been a fundamental precondition of adapted physical education.
  - Mobilizing, further developing dissolving of contractions, of agility, of flexibility.
- 3. Developing of motoric culture:
  - Establishing of motor skills and abilities,
  - Acquiring knowledge considering way and method of performing and applying motor activities,
  - Aesthetic, exact, successful and economic carrying out of motor activities,
- 4. Get children (to become) keen on sports, playing games, do regular body exercises, supporting the inclusion of it into the certain lifestyle. Supporting the choice of adequate and proper sports fitting the imaginations as it will result in a lifelong physical activities.

5. Physical exercises, educational conditions (adult persons of respect, tasks, contemporary age groups) eliminate the feeling of social exclusion, supports the establishing of health-conscious behavior and the chances of a more quality-like life.

Among the tasks of Adapted Physical Education restoring health status and performance, favouring regular bodily training has to gain a stressed role in school education and curricula (Gita et al., 2008).

#### Summary

Differentiation of international and national literature inspired us to clear the definitions, tasks and goals. This requires us to reconsider the definition, goals and tasks of APE. Hope we could give some heading for educators or policy-makers. This way we wish to help colleagues who work in the fields of sports, PE or Adapted Physical Education and regard the healthy body development of children as their most important task to perform. Clearing the academic basis and setting the theory into the practice is a precondition to effective working. We can also conclude that APA contains less educational tasks and goals, while APE – on the basis of PE goals – hold much more educational aim. That is why a graduated APE teacher has much more responsibility in the point of view of students' healthy future.

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