STUDIES IN PHYSICAL CULTURE AND TOURISM Vol. 16, No. 4, 2009

ANDRZEJ KRAWAŃSKI

Department of Bases of Health Education, University School of Physical Education in Poznań, Poland

PEDAGOGICAL CHALLENGES OF PHYSICAL EDUCATION

Key words: pedagogical directive care of the body and health, non-directive education, interactive didactics.

ABSTRACT

The article presents a pedagogical platform to meet specific intellectual challenges of physical education. The author thoroughly supports the thesis that the main aim of educational activities using physical culture means is the development or reconstruction of man's attitude towards his body. Actions undertaken by the pedagogue (PE teacher, sports coach, physical therapist) must, first of all, affect the learner's psyche. Mechanical body training or occasional pleasure derived from practicing sports or physical recreation are of secondary importance. The paper also discusses the concept of health in a pedagogical perspective and the place of physical education in the process of general education. The main part of the text focuses on a pedagogical platform for implementation of the discussed pedagogical principles. It makes a comparison between the traditional, directive concept of physical education and a new non-directive (non-authoritarian) approach to teaching and learning. Finally, the main assumptions of interactive didactics in physical education are presented.

Physical education has been an integral part of the Polish education system for a long time; however, it has not always had its due place in school hierarchy and social awareness, despite its high educational potential and expectations of Polish legislators¹. The potential role of physical education in the modern world was discussed in my earlier text on intellectual challenges of physical education [11]. In the analysis of potential educational values of physical culture the following issues were noted:

- 1) There are strong physical education traditions in Poland referring to the best European standards.
- 2) There is a marked discrepancy between the expectations of theorists of education and legislators and professional activities of PE teachers.
- 3) Educational institutions produce generally physically fit graduates with low awareness of the role of physical culture in the area of body and health care.
- 4) The potential role of physical education in the system of general education is undervalued.
- 5) The significance of sport as a factor affecting the development of life skills and personality traits is underestimated.

¹ Physical education in the new system of general education in Poland (regulation of the Polish Minister of Education from December 23, 2008 on the national curriculum of pre-school education and general education in individual types of schools, appendices 2 and 4) is to undergo changes of its social image. The regulation stipulates that "physical education fulfills important educational, developmental and health functions. It supports students' physical, psychological and social development (...) it plays the leading role in students' health education." Apart from its health aspect also the potential contribution of physical education to general education is duly noted.

Correspondence should be addressed to: Andrzej Krawański, Zakład Podstaw Wychowania Zdrowotnego, Akademia Wychowania Fizycznego, ul. Grunwaldzka 55, b16, 60-352 Poznań, Poland, e-mail: eduzdrow@awf.poznan.pl

The above observations point to the need to seek better remedies, effectively match the declared educational and social principles of physical culture with the pedagogical theory as well propose an appropriate teaching approach. The main principle of physical culture is, first of all, the educational standard: *development of a personality caring about the body and health*. Theorists agree that this educational standard should constitute the basis of the proper concept (doctrine) of physical education.

Personality caring about the body and health as an educational standard

In our activities in the areas of physical development, stimulation, rehabilitation, sport and physical recreation we must be aware that we affect the human psyche and direct people's attention to the needs of their bodies. This observation was made a long time ago by a famous Polish philosopher Władysław Tatarkiewicz (1886-1950) who stated that: "Physical culture is psychological care of the body"². Also S. Strzyżewski [14, 15, p. 20] stresses that the primary goal of physical education is "development of students' attitudes (intellectual, emotional and volitional predispositions) towards care of their own bodies, health, fitness and beauty. This is why physical education (education in physical culture) can be called education." The aim of educational activities with the use of means of physical culture should be creation or reconstruction of learners' attitude towards their own bodies. The essence of educational activities undertaken by a teacher (coach or physical therapist) is affection of the psyche, not mechanical body training or achieving occasional pleasure from practicing recreational plays or sports. In the early 1970s Maciej Demel developed a novel theory called re-pedagogization, in which he claimed that it was not a healthy body which established a desired personality, but on the contrary, through development of personality man can recognize the needs of his body.

Despite their verbal acceptance of this principle of physical education theorists, PE teachers, coaches or physical therapists do not usually follow it in their daily routines. They have different past experiences (as students or athletes) as well as different "philosophy" of professional conduct, system of values and a specific work ethos learnt in college, typical of the physical education community. This conduct has invariably included development of physical fitness and sport skills, as well as attainment of sports results. Helping students to experience their bodies, overcoming their physical weaknesses and developing lifetime habits of participation in physical activity as well as perceiving physical education as part of general education have been unfortunately sidelined.

The educational practice still concentrates on the instrumental aiding of physical development and mechanical training of physical fitness of students, athletes and patients. According to J. Drabik [2, p. 10], who also refers to H. Grabowski, "... we are good, even very good, at physical education understood as training of body movements, both in theory and practice." In fact, the concept of *personality caring about the body* is merely a showcase portrayed in textbooks, with no relation to the actual pedagogical practice in schools, universities, sports clubs, recreation centers or hospitals.

Considering the above the following thesis can be formulated: Care of one's own body is not a medical task accomplished with physical culture means, but it is primarily a pedagogical challenge requiring new reflection from pedagogues and therapists. Although physical activity, fitness and body hygiene are all biological needs, fulfilling them depends on one's awareness and conscious decisions. These decisions, although associated with specific job requirements, health condition and age, derive from the preferred system of values by an individual or a community and are part of the process of realization of life objectives. One should be aware of the message: my own body in my own hands, I create my own body, as a travesty of health promotion slogans.

The concept of health in the pedagogical process

A PE teacher and physical therapist should be regarded by the community as those who know how to maintain or improve health. The contemporary social image of these professions does not evoke such associations. Like the aspect of *body*, the aspect of *health* must not be treated in the educational process in a concise, mechanical way, merely confined to the biomedical interpretation of health. A conception that physical culture in all its forms and manifestations serves health should not be sustained in students' awareness with the teacher's aid. Stimulating students' physical

² W. Tatarkiewicz, 1978, pp. 79-80, Parerga. Wyd. PWN, Warszawa.

development and providing them with some knowledge about biochemical and physiological aspects of physical endurance do not make them reflect on the state of their own health.

With the use of physical culture we must aim at beneficial changes in the student's personality, through processing knowledge of health determinants into positive attitudes towards one's own body and body-care skills. This way of thinking about the relations between health and physical education makes care of one's health a reference point for all educational activities (see A. Krawański [9] and legislative regulations mentioned earlier). It cannot be assumed, however, that through physical education one can maintain health in all its possible dimensions. Caring about the body with the use of physical culture means is an important component of health potential (health resources). Health potential is determined by many other factors of the life and work environment as well as biological properties of the human body. It is difficult to optimize all these factors via physical culture, and it may not be assumed either that physical activity and sport are panacea substituting for all other factors. Unfortunately, such opinions are sometimes expressed by members of physically active and sport communities.

The approach towards health in modern education is based on the student's and teacher's awareness of the holistic dimension of physical culture. A PE teacher must be able to explain to his students the deep meaning of human physical activity and significance of sport for their health, without referring exclusively to biomedical knowledge enhancing physical development, sport results or improvement of health regardless of one's occupation or social role. All of this students should learn from their PE teacher, not merely by listening to him or her but through developing educational procedures aimed at acquisition of health selfimprovement skills and knowledge of one's own body needs. This requires not only unconventional ways of thinking from the teacher but, first of all, possessing skills appropriate for these pedagogical procedures. Accepting the above approach means caring of the body with regard to *health*, not *caring* of the body and health regarded as two complementary categories (physical education aims). Only then will this understanding of personality caring about the body and health become the main construct of physical education.

Pedagogical challenges of physical education as a part of general education

Another pedagogical issue connected with the modern approach to physical education is the necessity of more extensive inclusion of physical education into the system of general education. The legislators in Poland point to the aspect of general education in each school subject in order to make the student and the teacher realize the relationship between the course contents and the demands of daily life. This is also a serious intellectual challenge to PE teachers (the idea of development of so-called *life skills*³ was discussed in one of my earlier papers). This challenge is, however, not only intellectual, but it must also become a part of pedagogical instruction.

Practicing sports and overcoming physical weaknesses in PE classes or during rehabilitation sessions naturally require abilities to cope with stress situations, make fast decisions, kick bad habits and form social relations. Participating in PE classes and sports rivalry arouses many emotions and creates situations in which the teacher can make use of interpersonal skills, self-awareness, transformations of systems of values, and in particular, decision-making skills, and coping with difficult situations and stress management. These are examples of life skills which can be developed through physical education, sport and physical recreation. There are many personality traits and psychological dispositions of students, which have also been referred to (at least rhetorically) by PE teachers. The fundamental difference in the modern

³ The term *life skills* has been present in the pedagogical and psychological discourses since the 1990s. In 1999 the WHO Department of Mental Health in Geneva published a definition of life skills as well as aims and strategies of their implementation after consultations with numerous organizations (Partners in Life Skills Education, Geneva 1999). The term life skills according to WHO refers to a number of mental characteristics and properties constituting the basis for development of man's personality. Depending on the stage of their development life skills are used to form practical, professional and health-related skills necessary to maintain and improve health, physical fitness, and professional and community activities. The degree of development of life skills determines one's success in education, work and social life. Therefore, the main idea of modern education is to develop life skills.

educational approach is that the student and the teacher should actually recognize possibilities of development of important life skills for each and everyone in physical culture. It is assumed that life skills are not merely educational side effects but are one of the main objectives of the entire educational process. The teacher must make students aware that participation in PE classes or sports is an opportunity to develop their skills of making specific commitments or making compromises. Also participation in sport should effectively develop the understanding and acceptance of social norms by the athlete and by the spectator.

Therefore, the educational process should facilitate the awareness of the growing range of potential relations between man and his environment with the aid of diverse stimuli in the areas of physical activity and life and work environment. In result, physical education should be mentally associated with an improvement of one's own skills to overcome daily hardships. Such possibilities of education through physical education and sport have been (rhetorically) noted by PE teachers and sports coaches, but have not been yet widely used in the pedagogical sphere. During traditional PE classes students do not find out the actual lesson aims. PE classes are not usually associated with improvement of daily skills requiring better visualmotor coordination, maintenance of body balance, more efficient work, etc. In all these cases students should be aware that their physical fitness is a component of their personality significant development, allowing acquisition of important skills, which in their understanding have not had anything in common with PE classes. Students should realize that physical fitness is not only about effective participation in sport or recreation, but a way to attain a number of educational and life objectives in a faster and better way. This all requires changes in students' and teachers' mentality concerning the role of physical education. It is a very difficult task as it clashes with the fossilized social perception of the role of physical education, and it also requires changes in teachers' perception of their role. Teachers, coaches and physical therapists are not able to make one aware of these effects of physical culture through the educational process. Students, patients and athletes associate PE classes, training sessions or recreation and physiotherapeutic procedures with facilitation of muscle work, organ function, achievement of better sport results, leisure pursuits, body look, etc.

This range of objectives limits one's interests in this area to purely instrumental, developmental, sports, health-related, recreational or even hedonistic tasks. In particular, young people with no sports interests find only these tasks of physical culture but fail to note any higher values of physical culture crucial for their professional and intellectual development. It is therefore important to indicate the essential dilemmas for teachers facing the mentioned pedagogical challenges.

Pedagogical dilemmas of PE teachers

The traditional approach to the human body of PE teachers, coaches and physical therapists in terms of somatic build, physical fitness and general prophylactic recommendations (desired pro-health patterns of behavior) and biochemical-physiological-salutary mechanisms fails to raise such valid questions as:

What does it have to do with me? How can I gain it? Do I really need it? Am I able to gain it? Why should I be concerned with it? How can I meet these requirements and expectations?

Even if someone is temporarily aware of some of these questions, he or she cannot find answers to them in the traditional educational process. The answers usually appear too late as consequences of a disease, or are obtained through the process of socialization rather than education (see also Krawański [10]). In result, one at least realizes that some actions should be taken, but in practice the knowledge and awareness of the needs of one's own body and health are not implemented. In the process of their education, learners did not have a chance to get to know how to fulfill these needs, nor gain the necessary experience. They were only informed or made to undertake such actions during PE classes or in the military; they participated in such activities in school, hospital, sanatorium or in sport competition, focusing on attaining good results. The question how to use physical education to make people perceive and fulfill the needs of their bodies and health has not been considered in depth so far. Being a participant in the educational or therapeutic process on different stages of one's life (school, sanatorium, hospital, holidays, recreation center) one should be able to reveal his

or her health needs and body preferences with the means and methods of physical education. People should also acquire the basis for future, independent development of skills necessary to fulfill their body and health needs. Only then can one's attitude towards the body and health needs be positively affected. The mechanical impact of physical exercises and practicing sports for good results only is not enough to recognize the real lifetime needs of one's own body and health.

Another pedagogical dilemma is the fact that the development of a personality caring about the body and health does not take place, if the educational process fails to involve the diverse influence of the social environment on man's system of values, attitudes and patterns of behavior towards his body and health. Sociologists, and more often pedagogues (not only social ones), emphasize the role of social setting⁴, not as a determiner but as a potential modifier of the noted relations between man and his environment. It means there should be an interaction between socialization and various forms of education. Modern pedagogy should make more extensive references to the learner's personal experiences. The teacher must know how to use information about the learner's living environment, preferred system of values and patterns of behavior. The teacher must know the learner's intellectual limitations and prejudices, but also make use of traditions, relationships community between lifestyle and the surrounding environment and material culture. This way pedagogues can realize educational goals with references to the social reality. The subject of interest to the pedagogue (in our case the PE teacher) consists of conditions of the educational process aimed at the development of attitudes and patterns of behavior towards the body and health at home, in school, in a sports club and at work in the setting context. In such an educational process a challenge to the pedagogue is helping him or her find answers to questions such as: How to live to have an able body? How to live to maintain health? How to live to use the body and health to maintain or improve the quality of one's life?

The aims and tasks of modern physical education can be summarized as follows: A PE teacher can influence the development of student's *personality caring about the body and health* providing that:

- a) he or she must notice that mechanical body training does not automatically lead to deep reflection about the needs of the human body; it merely stimulates one's physical development or temporarily improves one's physical fitness;
- b) he or she must accept the rule that training of the body itself does not encourage mature health reflection (as assumed in the traditional understanding of physical education);
- c) he or she must recognize and use psychosocial situations created with experiences of virtues and vices of one's own body in the educational process.

However, the learner's new attitude towards the body and health is developed, first of all, by interactions between the educator and the learner. Neither nature nor culture determines educational aims in advance. They are only indicators of potential ranges of changes in individuals through socialization and education. The task of the pedagogue is to help the learner match the biological indices of his or her body with nature and culture. In order to accomplish this task the pedagogue must adopt a proper educational platform and such a concept of education, which would allow using effective pedagogical procedures. The education system (adopted concept of education) can impose certain solutions, implement a series of defined "truths" or ideologies (in our case health or attitude towards one's own body), but it can also, through human knowledge and experience, stimulate the learner to seek his or her own ways of development of the body, attitude to health, or - as mentioned earlier - affect one's attitude to the world through the prism of one's attitude towards the body and health. The pedagogue helps the learner reveal these needs and whether duties. biological or social. The pedagogue's imposition of certain solutions or procedures leads only to the learner's passive acquisition of information, and the latter is not able to realize the association between the knowledge and his own life and needs.

Proper pedagogical platform (learning and upbringing strategy)

A crucial pedagogical question is: What theory of education should be applied to achieve the aims of modern education? In general, one of

⁴ See Grossmann R., Scala K. [5] on the significance and uses of social setting.

two fundamental ideologies of education can be recalled:

- theories of directive (authoritarian) education aimed at development of some defined personality patterns in the learner, i.e. aimed at the learner's adaptation to the existing image of reality;
- theories of non-directive (antiauthoritarian)⁵ education aimed at enhancement of uninhibited learner's development, i.e. emancipation from the existing image of reality and promotion of wide-range changes of man and the world.

Theoretically, each of these approaches can be used in education about the human body and health. In both cases the main objective is to attain proper care of the body and health; however, the means of attaining this objective in the educational process are entirely different.

Directive education aims to produce a certain ideal of man by attaining body- or health-related goals determined earlier by experts. The directive educational process focuses on achievement of a well-defined state (ideal) of health, or – by means of physical culture -a pattern of personality caring about the body's physical fitness. This educational concept requires methods based on categorized biomedical knowledge, and it uses examples of desired patterns of behavior as a reference frame. Using elements of this knowledge as well as numerous body training procedures a PE teacher develops a student's personality by stimulation of the latter's physical development, fitness and health. It is not really that important whether the knowledge and procedures correspond to the learner's system of values, experiences and physical and intellectual limitations of his body and mind. In directive education a student with these limitations will get a lower grade, or evaluation standards will be lowered otherwise. At the same time it is assumed that this strategy will lead to a permanent change in the student's way of thinking and acting after completion of the educational process.

Traditional physical education (like traditional health education) has been to a great extent based on directive concepts of education. The observed effects of this pedagogical approach to the body and health are fairly limited. As mentioned before, after completion of physical education the development of students' care of the body and health is hardly noticeable. The complex notion of health and the multidimensional functions of human body are generally not affected by the strategies and procedures of directive education. The following observations have been made about directive physical education:

- a) There is a discrepancy between the learner's knowledge and demonstrated behavior towards the body and health;
- b) The learner's attitude towards the body and health is not an outcome of education but of socialization consisting of the influence of family and community traditions and periodical fads involving social stereotypes and prejudices;
- c) There is no possibility of independent and mature determination of the needs of and duties towards one's own body and health;
- d) The models of behavior towards the body and health postulated by the pedagogue seem distant and nearly unattainable;
- e) The actions directed towards the body and health are confined to biomedical knowledge about weakness of the body build and fitness (promoted pro-health patterns of behavior are mostly aimed at disease prevention);
- f) Promotion of utilitarian values of the body and health focuses only on the possibility of performing physical labor or achieving good sports results.

These observations lead to two significant conclusions concerning the process of education. First, it should be noted that a learner who acquires new knowledge about himself and the world, or who faces the efforts to change his behavior, relates this knowledge and these changes to his family and community traditions. This acceptance (or the lack thereof) is often a factor determining the effectiveness of the educational process. Second, to change his behavior the learner must possess appropriate "internal" skills of effective action, i.e. he must possess or develop a number of psychological dispositions (specific reaction skills of one's psyche) allowing independent actions towards the fulfillment of the needs of his own body. These dispositions are referred to as life skills, and these expectations are matched by the concept of non-directive education. The goals of non-directive education include freedom, self-

⁵ The mentioned division of pedagogies (proposed by R. Kwaśnica [12]) is one of many theoretical classifications. It seems to be perfectly applicable to physical education with its concepts of the human body and health.

fulfillment, diversity (the right to be different), tolerance, critical thinking, self-responsibility, maturity, openness, brotherhood, creativity, solidarity, risk and directness (after B. Śliwerski, [16] p. 218).

Non-directive education is naturallv associated with the humanistic and ecological approach to the human body and health, i.e. it refers to the biopsychosocial model of health and disease, and in turn, to the ideas of health promotion. Such an educational platform based on experiential learning makes it possible to focus the learner's attention on the needs of his body by using his own qualities and realizing biomedical limitations and socio-cultural conditions. In the educational process references can be made to the concept of health promotion: my health (body) in my own hands, I am responsible for my own health (body), along with specific interventions by the teacher.

The non-directive process of education assumes, first of all, development of learner's personal activity aimed at removal of existing mental limitations and, to some extent, physical barriers. Thus the non-directive educational platform places the learner in the context of his abilities and needs determined by mental barriers and the living environment. It is a permissive rather than coercive pedagogy. It is generally assumed that all educational activities aimed at a change of man's behavior are only effective if they result from a series of programmed didactical episodes (meetings between the pedagogue and the learner) which only aid the learner in his search for his own attitude towards the body and health. The educational process understood this way must not be isolated from the learner's socio-economic conditions. Therefore each pedagogue must possess the minimum sociological knowledge and, in particular, must know how to use sociological counsel. This concept of physical education stresses the holistic, biopsychosocial dimension of human body and health. To avoid charges of propagation of an extremely technological vision of education, non-directive education relies on the universal system of values and norms as a frame of reference for decisions made about the human body. Axiological reflection affirming the universal values and the notion of humanity should be a guideline for all actions concerning the human body and health, and should refute all accusations of development of the learner's selfish attitude towards others and the world.

However, one may doubt whether the suggested educational approach can prove correct in every situation, and whether one can always afford experimenting with one's own body and health in the educational process, e.g. drug abuse, illegal doping in sport, violence. Should the pedagogue take a firm stance and prompt action in such situations? Certainly, the pedagogue's intervention is necessary, but it should not be excessively directive, based on a conviction of one's absolute right. According to J. Górniewicz [4], who propagates his concept of permissive pedagogy, the pedagogue's *soft intervention* in the learner's development is allowed in non-directive education. It means that the teacher (parents) acting in a non-directive way should recognize situations requiring taking a determined stand. However, gaining students' approval for this stand should not be based on enforcement of orders and compliance with bans, but on dialogue, listening to each other, and seeking causes, remedies and substitutes. Different studies point to the fact that it is very difficult to precisely demarcate between adaptive (directive) pedagogy and emancipative (nondirective) pedagogy. According to Śliwierski [16, p. 30] these are two opposite ends of a single entity.

Foundations of interactive (non-directive) didactics

Modern teaching in a present-day educational institution (or health education in a medical institution) is based on the premise that the learner (patient) should not be merely a passive recipient of instructions from the pedagogue (therapist). The pedagogue should perceive the learner as a partner but not an object of pedagogical or therapeutic manipulations (naturally sympathetic) aimed at providing the learner (patient) with the necessary (in the pedagogue's opinion) skills. An opposite pedagogical strategy should be implemented, i.e. let us ask learners about what they think about our offer, what they fear and why they are not undertaking specific activities towards improvement of their bodies. This strategy involves referring to individual and collective experiences, development of attitudes and skills and combining the "new knowledge" with the learner's "old knowledge" and experience.

The learner must be directly and actively involved in the learning process. Active learning means, therefore, not only solving a task assigned by the teacher, but also deeper emotional involvement in application of the new knowledge for one's own needs. Active learning is supposed to give a learner a chance of interactive participation in seeking his own relations with a given subject, and to encourage generation (processing) of knowledge rather than its acquisition (gathering). According to L. Dee Fink [3]⁶ active learning is based on two kinds of dialogue: "Dialogue with Self" and "Dialogue with Others" as well as two kinds of experience: "Observing" and "Doing" (Fig. 1). Active learning requires an efficient combination of these kinds of dialogue, observation and action. A PE class by nature contains all these components. They are not sufficiently utilized, or are sometimes even inhibited by a PE teacher who imposes his or her own decisions or solutions.

the learner is and wants to be a doer of his or her own actions, who chooses the tasks, roles and partners in his activities, makes independent decisions affecting the course of events and results, and is responsible (Gurycka 1997 after W. Strykowski [13] p. 5). PE teachers must not rely exclusively on passing general biomedical knowledge to their students. Without noticing an individual in the biopsychosocial context of his needs, declarations that the PE teacher's task is to develop pro-social, pro-health and pro-somatic attitudes and patterns of behavior are not convincing. The educational process should facilitate the development of these attitudes and skills in the proper and suitable way for each learner.

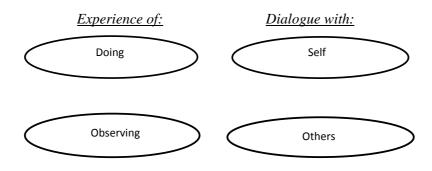


Figure 1. A model of active learning (L. Dee Fink [3])

The interactions between the elements of the active learning model not only enhance the current educational outcomes, but also constitute an essential basis for attainment of permanent learning and teaching results. Learning and teaching are most effective when a learner is able to observe and/or actively take part in the educational process. Passive listening to the teacher or automatic performance of exercises does not necessarily provide learners with skills. The role of the teacher is to facilitate learner's participation in the process of experiencing knowledge, gaining skills and performing effective actions. This way proper conditions are created for enhancing one's identity:

⁶ Fink D.L., 1999, Active learning, Reprinted with permission of the University of Oklahoma Instructional Development program, July 19, 1999, Available from the World Wide Web: http://honolulu.hawaii.edu/intranet/committees/FacDev Com/guidebk/teachtip/active.htm.

Students in a traditional PE class, who run, jump and show emotions (laugh or sometimes even cry) are in fact passive as they strictly follow the teacher's instructions. The PE teacher performs a specific educational task focusing on its technicalities, but he or she does not utilize, nor make any wider references to the students' emotions, experiences and reactions to that task. PE teachers fail to reveal to their students the psychological relations formed while overcoming body resistance as well as the significance of movement for students' achievements in and out of school. If a PE class subject is defined as practicing a certain jump or throw, a student is unaware why it is worthy to practice it in the context of walking on the street or using technical equipment. A student comes out of class convinced that the goal of his or her PE class was attainment of a specific sports result or correct performance of a specific exercise.

The main idea of modern didactics is to utilize the learner's current and past experiences to reflect on whether the pedagogue's offer can be effectively used to satisfy the learner's needs. The learner recognizes a relationship between new knowledge and tasks provided by the pedagogue and his own "old knowledge", needs and capabilities (experiential learning). In this way the learner's interest and activity are generated, and the learner's attitude to the teacher is completely changed. Maintaining, enhancing or changing patterns of behavior becomes easier if learners can test them, talk about them or observe others.

Everybody, often unaware, reacts to challenges to their body in a specific (their own) way. The diversity of these reactions, important to each individual, is becoming rather burdensome in the modern world. If one is not prepared for the complex interactions with the world he or she narrows down their range of responses and patterns of behavior and is often unable to react actively to the changing conditions. People often give up the pleasures of life being convinced that something is not for them anymore, or that they are not fit for something. People's conviction about their limited health capabilities lowers the quality of their life, without any biological or medical reasons. Development of skills of reaction to changing needs of the body is the fundamental objective of modern philosophy of physical education. The learner must be convinced that he or she can successfully accomplish a new task, i.e. have a sense of selfefficacy.

PHYSICAL EDUCATION SHOULD DEVELOP SKILLS OF ASSESSEMENT OF THE CHANGING NEEDS OF ONE'S OWN BODY AND ABILITIES OF THEIR FULFILLMENT FOR LIFE

The sense of undertaken educational activeties comes down to teaching the learner how to manage the requirements of his or her body, observing the necessary (naturally assigned to one's body) amount of physical activity and other bodyrelated activities achieved by means and methods of physical culture. The educational process (at home, in school or in a sports club) generates *the inner imperative of care about the body* with the aid of physical culture and proper skills. This may not be achieved through medical knowledge or assessment of social costs of hypokinesia, or even through temporary participation in sports. One must learn how to experiment independently with one's own body and how to reveal the needs of one's own psyche. The task of a teacher in an educational institution, or of a therapist in a medical institution, is to, first of all, help the learner (student, patient) reveal the needs of his body and health, and then provide guidelines how to do it (in conditions of biological development, involution of the body, disease, in changing living or work conditions).

The implementation of the educational process based on the above observations should lead to a re-orientation of the learner's personality and focusing of the learner's attention on his own body, enhancing development of short-term and long-term plans for work and life. Experiential learning lets the learner:

- discover the possibilities and needs of his own body;
- learn independently basic psychomotor skills important in daily life;
- arouse his own recreational and sports interests and thus help develop a lifetime habit of taking part in physical activity;
- realize the potential advantages related to the improvement of health and quality of life with the aid of means of physical culture.

The above sociological and psychological aspects are becoming widely used by pedagogues in properly organized didactics. Experiential learning is assumed to be a process of knowledge construction featuring creative tension between four constituents: EXPERIENCE – REFLECTION – THINKING – DOING⁷. It is a recurring learning

See: J.S Atherton, 2002, Learning and Teaching: Learning from experience [On-line]: UK: file:///F:/2/experen1.htm; A.Y. Kolb, D.A. Kolb Learning styles and learning spaces: Enhancing Experiential Higher Learning in Education, http//www.learningfromexperience.com/Research Lib rary.htm; Lorenzen M., 2001, Active Learning and Library Instruction, Illinois Libraries, 83, 2, 19: 24, http://www.libraryinstruction.com/active.html; M.K. Smith, 2001, David A. Kolb on experiential learning, Encyclopedia of Informal Education, http:// www.infed.org/b-explrn.htm; Kolb D.A., Boyatzis R., Mainemelis Ch., 1999, Experiential Learning Theory: Research and New Previous Directions, http//www.learningfromexperience.com/Research Lib rary.htm; Ch. Mainemelis R. Boyatzis, D.A. Kolb, 2002, Learning Styles and Adaptive Flexibility: Testing the experiential theory of development.

process (cycle) responding to educational situations related to the taught subject. Individual experience is the basis for observation and reflection. These reflections are connected with more general concepts (universal theories, views, knowledge). As an outcome of the learning cycle new implications for action can be generated. They can be actively tested and re-used as guidelines in new experiences, i.e. in a new learning cycle. The model of experiential learning cycle was primarily developed by David A. Kolb [6] together with Roger Fry. The pedagogical procedure in this model consists mostly of class workshops. For the teacher this type of class activities is psychologically the most difficult one, as he or she has to accept the principle of partnership with the student. The teacher's task is to help the student organize the learning process and indicate alternative solutions without imposition of ready made ones (the only acceptable ones in the teacher's opinion). A teacher who is a partner of his or her student not only assigns the tasks but also recognizes the latter's subjectivity. It means that the teacher leaves the position of arbiter and assumes the position of student's advisor and guide.

Physical education class as an interactive activity

The presented characteristics of physical education require re-defining of PE class aims with reference to the deep meaning of different forms of movement, sports rivalry and outdoor activities. This approach corresponds to the most recent official PE curriculum guidelines of the Polish Ministry of Education. For example, "practicing ball throws" is not the aim of a PE class but an educational means. The proper aim of such a class is "recognizing one's own psychomotor fitness and concentration abilities." In a PE class with gym exercises the lesson aim can be defined as "understanding the reasons for and the sense of one's care of the body; the goal of a PE class with long-distance running exercises can be learning to take one's pulse metabolic changes during running in reference to an earlier biology class. If the lesson aims are formulated this way the aforementioned principles of physical education are related to:

- a) developmental needs of the human body;
- b) arousal of students' interest in their body hygiene and health;
- c) physical education as a part of general education developing life skills with the means of physical culture.

Activation techniques or workshop activities can be easily implemented in traditional physical education classes (Table 1).

The above lesson plan allows incorporation of workshop activities into a physical education lesson, and thus implementation of the principles of interactive learning and teaching discussed above. A PE teacher should use different student activation techniques at different stages of the class. They should be appropriate to the subject matter in class. One may ask whether PE classes should always be PE workshops. Certainly not, because the main idea of active learning and teaching is not only about workshops:

In preparation of any classes using sports activities, recreation or rehabilitation exercises teachers must account for tasks aimed at students' independent experiencing the needs and capabilities of their own bodies. Students must be shown the relationships between physical activity, health and quality of life.

After becoming acquainted with the process of active learning and teaching the teacher is expected to ensure his or her students experience individual references to situations in a gym, rehabilitation room, on a sports field, in the woods or at the swimming pool, and to explain to them the real meaning of such situations. In a conventional PE class consisting of three components (warm-up, main part, cool down) the teacher must create conditions for individual solutions of assigned tasks and situations requiring different reactions from each student. These situations must be placed in a wide context, and their multidimensionality must be emphasized. One should not worry about the decrease of effective physical activity during PE classes or rehabilitation sessions. The criterion of success is the learner's conviction about the usefulness of his efforts and his willingness to develop independently, whether or not his interests or occupation are in any way related to sports or even physical culture. The main conditions of

Management Learning, 33 (1): 5-33; A.C. Baker, P.J. Jensen, D.A. Kolb Conversational learning an experiential approach to knowledgecreation: http://www.learningfromexperience.com/Research_Lib rary.htm.

Course of lesson/Kolb's learning cycle	Duration in minutes*	Students	Teacher
Introduction, organizational activities	3	Students disperse or sit in a circle	Welcome, presentation of lesson goals, roll call
Experience Warm-up	5	Students, individually, collectively or in teams try to execute a task by themselves using teacher's guidelines	Teacher defines the first warm-up task for students preparing their bodies for more intensive physical effort
Main part A Experience	10	Same as above	Teacher defines tasks connected with reaching the lesson goal
Main part B Reflection, discussion	15	Students propose alternative task solutions or adjustments adapted to students' individual needs	Teacher gives advise, provides safety and defines other tasks
Broadening knowledge, teacher's explanation	7	Students receive information from the teacher and ask extra questions	Mini-lecture explaining the broader meaning of the discussed topic, e.g. rules of sports rivalry, sport ethics
Conclusion Testing in new situations Lesson evaluation	5	Discussion with teacher, possible commitments, active participation in lesson evaluation	Teacher concludes the lesson and/or sets homework, gives assessment

Table 1. Activation techniques and workshop activities

*Approximate times based on a traditional PE lesson plan

interactive teaching and learning in physical and health education are therefore:

changing the way of the teacher thinks about his role in the educational process;

- a) realization by the teacher of the real educational principles of using physical culture means;
- b) practical knowledge of modern pedagogical tools (Kolb's learning cycle, active teaching and learning techniques);
- c) incorporation of activation teaching and learning techniques;
- d) combining activities related to control and development of physical fitness of the body with curbing the consequences of diseases and injuries and creating favorable conditions for development of student's (patient's) permanent disposition to display behaviors conducive to better body and health care.

From the pedagogical standpoint, physical education and health education should be coherently combined. The aforementioned way of thinking and acting is a synonym of pedagogical innovativeness and efficacy in physical culture. Developing the habit of looking after the body and health is the outcome of the educational process and not a spontaneous result of physical training or therapy. The development of a personality caring about the body and health requires a long-term educational impact.

CONCLUSION

The effectiveness of physical culture requires three basic conditions:

- 1. Physical education should be understood as a means to develop life skills, not only to attain utilitarian, hedonistic, sport- and health-related goals.
- 2. The development of the learner's awareness of the value of his body should result in formation of effective skills of assessment of the needs of his body.

3. Satisfaction of the needs of the learner's body requires appropriate skills which ensure autonomous fulfillment of these needs.

The aim of physical education is therefore to transform one's personality to be able to recognize and satisfy the needs of one's own body in terms of physical fitness and development, using pro-health reflection. It is also important to make one recognize the values of physical culture in terms of development of psychological predispositions constituting the basis of general education and quality of life. The educational process is not about generating knowledge or patterns of behavior towards the body, but about experiencing different perspectives of the body accounting for health and quality of life. If the means of physical culture make one aware of a more sensible order of life, than physical education is a significant premise of modern education in general.

REFERENCES

- Demel M., O trzech wersjach teorii wychowania fizycznego (On three varieties of physical education), AWF – Wydawnictwo Skryptowe, 106, Kraków, 1990.
- [2] Drabik J., Może naszym nieszczęściem jest "wychowanie fizyczne" (Is "physical education" our misfortune?), *Wychowanie Fizyczne i Zdrowotne*, 2004, 5, 9-12.
- [3] Fink D.L., Active learning. Reprinted with permission of the University of Oklahoma Instructional Development Program, July 19, 1999, http://honolulu.hawaii.edu/intranet/committees/Fac DevCom/guidebk/teachtip/active.htm.
- [4] Górniewicz J., Dylematy metodologiczne we współczesnej teorii edukacji (Methodological dilemmas in modern education theory), in: S. Kawula, J. Rusiecki (eds), O nowy model wychowania – cz. II (On a new model of education. Part two), Glob, Olsztyn 1995, pp. 55-78.
- [5] Grossmann R., Scala K., Health promotion and organizational development. Developing settings for health, with the assistance of Dagmar Untermarzoner, Vienna 1993, WHO Regional Office for Europe, Health Promotion Unit Lifestyles and Health Department IFF Health and Organizational Development.
- [6] Kolb D., Experiential learning: Experiences as the source of learning and development, Englewood Cliffs, NJ: Prentice-Hall, 1984.

- [7] Kolb A., & Kolb D.A., Learning styles and learning spaces: enhancing experiential learning in higher education, (to be published by Academy of Management Learning and Education, 2003), http://www. Learningfromexperience.com/Research Library.htm.
- [8] Kolb D.A., Boyatzis R., & Mainemelis C., Experiential learning theory: previous research and new directions. Prepared for R.J. Sternberg and L.F. Zhang (eds), Perspectives on cognitive learning, and thinking styles, 2000.
- [9] http//www.Learningfromexperience.com/Research_Library.htm.
- [10] Krawański A., Ciało i zdrowie człowieka w nowoczesnym systemie wychowania fizycznego (Human body and health in the modern system of physical education), AWF, Poznań, 2003.
- [11] Krawański A., Interakcje socjologii i pedagogiki zdrowia (Interactions of health sociology and pedagogy) (in:) W. Piątkowski (ed.), Zdrowie, Choroba, Społeczeństwo – studia z socjologii medycyny (Health, disease, society – studies in sociology of medicine), Wydawnictwo Uniwersytetu Marii Curie-Skłodowskiej, Lublin, 2004, 143-156.
- [12] Krawański A., Intellectual challenges of physical education, *Studies in Physical Culture and Tourism*, 2009, vol. XVI, No. 3, 281-290.
- [13] Kwaśnica R., Dwie racjonalności. Od filozofii sensu ku pedagogice ogólnej (Two rationalities. From the philosophy of sense to general pedagogy). IKN ODN, Wrocław, 1997.
- [14] Strykowski W., Podmiotowość w kształceniu i wychowaniu (Subjectivity in education), *Edukacja Medialna*, 1, 2000, 4-7.
- [15] Strzyżewski S., Proces kształcenia i wychowania w kulturze fizycznej (The educational process in physical culture), Wydawnictwa Szkolne i Pedagogiczne, Warszawa, 1986.
- [16] Strzyżewski S., Proces kształcenia i wychowania w kulturze fizycznej (The educational process in physical culture), Wydawnictwa Szkolne i Pedagogiczne (3rd. ed.), Warszawa, 1996.
- [17] Śliwerski B., Współczesne teorie i nurty wychowania (Contemporary theories and trends in education), Oficyna Wydawnicza Impuls, Kraków, 2001.