

Journal of Social Studies Education Research

Sosyal Bilgiler Eğitimi Araştırmaları Dergisi

2017:8 (3), 227-237

Formation of Pedagogical System for Individual Self-development by Means of Physical Culture and Sport

Valery D. Panachev ¹, Leonid A. Zelenin ², Anatoly A. Opletin ³, Sergei A. Verbytskyi ⁴

Abstract

Problems of formation, development and introduction of the modern pedagogical self-development system in university educational process by means of physical culture and sport have been considered in this article. Such generated pedagogical system reflects practical implementation of social order on the modern educational paradigm aimed at creation of competitive, physically and morally strong individuals. This system promotes self-realization of students' individuality in formation of physical culture and sport competencies as well as competencies of self-development. Contemporary conditions of society's development and analysis of the world social cultural and educational tendencies show that recently the object of scrupulous society's attention and the subject of interdisciplinary research have become different aspects of person's behavior in respect of his health in many highly developed countries. The slogan of such relation is: "Health is not everything but everything without health is nothing". And this very principle specifies the problems of students' self-development during intensive preparation for professional activity in the course of university training. These problems are aimed at maintenance of their health and improvement of physical preparation considering formation of professional motor competences for effective and qualitative mastering of future profession and career after graduation from the university.

Keywords: Pedagogical system, Individuality, Creative self-development, Self-realization, Physical culture, Non-traditional methods of physical culture.

Introduction

Due to transformational mechanisms of Russia's involvement in the integrated educational environment of Europe (Bologna Process) demand of population for qualitative goods and services appeared to be in the centre of the modern society. World and Russian social-economic transformations of the last decade have led to review of role and functions of students' physical culture promoting formation of human potential of young people. Functions of physical culture in new conditions are out the frames of physical qualities formation and motion activity

¹ Prof, Perm national exploratory polytechnic university - Perm, <u>panachev@pstu.ru</u>

² Prof, Perm national exploratory polytechnic university - Perm, <u>panachev@pstu.ru</u>

³ Asst. Prof, Perm national exploratory polytechnic university - Perm, <u>panachev@pstu.ru</u>

⁴ Sen. Lect., The National University of Life and Environmental Sciences of Ukraine - Kyiv, panachev@pstu.ru

training. They have become the social factor of reproduction of one of the elements of productive forces, namely of labor recourses. To become the subject of one's own life means to realize its purport, to be capable of self-determination, self-development and self-improvement.

Modern generated pedagogical system of individual self-development by means of physical culture makes possible to achieve high level of realizing the mechanism of one's own self development and the way of its control; to study the fundamentals of dialectical person's self-development philosophy; to master their practical application; to study Russian system of self-defense, its technical and psychological aspects; to acquire the experience of making individual self-development technology both at lessons, trainings, sport events, holidays and in conditions of everyday life activity; to acquire the experience of sport events refereeing on the city, Krai and country scale.

This pedagogical system of individual self-development by means of physical culture is oriented to formation of such person's qualities as steadiness, single-mindedness, independence, self-developing activity, self-reliance and assurance of one's own force, attention to the environment, and desire for healthy life-style, for physical perfection, beauty and harmony. Improvement of intellectual, moral, physical and cultural level, responsibility, readiness for rational self-restriction, tolerance, creative realizing of participation in educational process with the aim of self-development and self-improvement are the components of this system as well. New paradigm of individual self-development states new strategic problems of competence approach to the establishment and development of society in whole and of every person in social medium. Rapid development of technology in all branches of industry requires extensive knowledge stored in the process of education and formation of professional competencies of young people. That was the main reason for elaboration of specialized pedagogical system of professional individual self-development by means of the modern technologies of physical culture and sport. The practice of competence approach to the given system showed positive results during pedagogical experiment with students. During the process of this system realization the model of students' preparedness for self-development in spots environment of university has been worked out (Image 1).

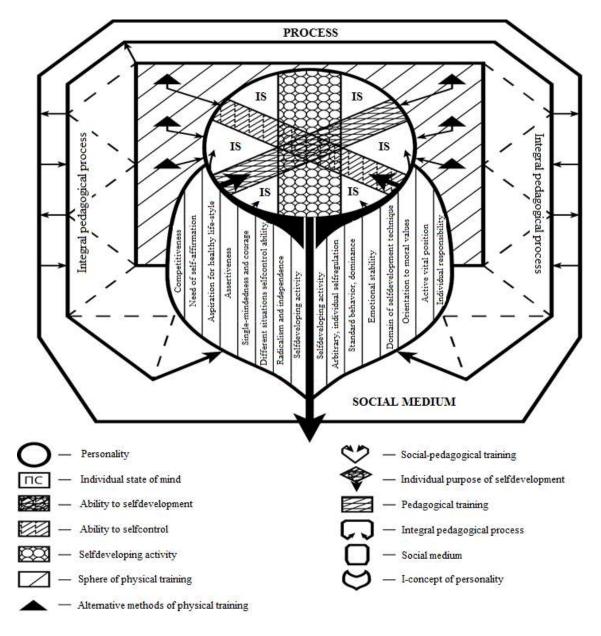


Image 1. Model demonstrating the functioning of pedagogical system of individual selfdevelopment by means of physical culture and sport in the experimental regime.

Methods of research

Experimental program of physical culture and technology of its realization was elaborated on the base of the model. The tasks of experimental program include intensification of educational function and reorganization of physical training forms both at lessons and in the

students' independent activity. Experimental work was organized in order to solve these problems. The control group (45 persons) was composed from the 1st year students who were trained in accordance with traditional program of education. 46 students were trained according to the experimental program. Experiment was carried out during the academic year. At the end of the year there were shown control results.

Review of the literature on the subject

Analysis of the world social cultural and educational tendencies shows that recently different aspects of person's behavior in respect of his own health have become the object of scrupulous attention of society and the subject of interdisciplinary research in many highly developed countries. There are tested different systems of healthy lifestyle education (philosophical, educational, medical, politically-radical, sport-oriented, etc.) as the factor of person's competitiveness on the labour market and in conditions of creative self-realization, self-development (Balsevich, 2006; Zagvyazinsky, 2000; Lubysheva, 2006; Makeeva, Kunitsyn & Vucheva, 2004; Manzheley, 2007; Opletin, 2008; 2009).

The common opinion of specialists in the sphere of physical culture concerns the recognition of necessity of reconstruction of students' physical culture system on the base of the principles of humanistic pedagogy, ethics and psychology oriented to self-development of trained individuals.

The analysis of students' physical culture system makes possible to state a number of its main contradictions which are characterized by:

- availability of innovative programs of physical culture and poor development of adequate technologies providing their realization;
- demand for necessary level of students' physical culture and the lack of teachers' preparedness for such necessity;
- importance of students' subjective position in sport-educational process and low level individual utilization of developing pedagogical technologies providing their demonstration and establishment;
- orientation of educational process to formation of physical culture and utilitarian applied orientation of estimation criteria of successful mastering of instructional material specified by the program on physical culture.

While analyzing the organization of physical culture lessons at universities as well as students' attitude to these lessons the following tendencies could be mentioned:

- poor students' interest for physical culture lessons, especially if they are taught traditionally. Students' demands, motives and value orientations in transformation of their physical nature are practically not taken into consideration;
- poor readiness of the 1st year students to organize their independent exercises, to strength their health and to improve their creative activity;
- lack of teacher's competency level correspondence to the modern requirements which is revealed in poor professional willingness to master new forms of knowledge of physical training, modern technologies demanding for mastering individual systems, means, methods and forms of their organization;
- lack of teaching materials concerning students' self-development by means of physical culture.

All these facts impel us to elaborate the system of students' self-development by means of physical culture.

Pedagogical system of individual creative self-development by means of physical culture we treat as the system of methods and means of students' physical training at university of non-sport profile which is based on the interaction of persuasion and suggestion having the ability to rise pedagogical efficiency of educational process in solving the problem of physical and social-moral united development of future professionals by means of physical culture and sport.

This system is called to provide comprehensive, balanced individual development on the base of students' involvement in the process of self-regulation, self-improvement, and self-development both in physical and in social moral sphere. The system includes the following components: universal limbering-up system (Opletin, 2009), integral systematic method of self-improvement with the elements of yoga (Ivanov, 1990), social-pedagogical training (Novosyolov, Opletin & Titova, 2003; Novoselov & Opletin, 2007), Russian native system of self-defense (Mach, 2008), space suit gymnastics, energy gymnastics, informational gymnastics (Marchenko, 2011).

Results of research

Goal of research: students' familiarization with regular exercises, motion activity and improvement of functional possibilities of organism by introduction of pedagogical system aimed at student's self-development into educational process.

In the process of university educational work the following problems are being solved with the assistance of such pedagogical system: improvement of physical development of students, achievement of high level of training, of functional state and organism's resistance to the cold; training of moral, esthetic, motion culture, aspiration for health, beauty, love and harmony; development of requirement for self-actualization, self-developing activity, objective self-appraisal; moral development, correction of system of values; intellectual development, mentality; formation of vision. Modern generated pedagogical system of individual selfdevelopment by means of physical culture provides: influence on realized and instinctive state of mind; students' awareness of their physical and moral "I" by self-diagnosing, self-analysis, selfdetermination, self-education, self-control and reflection of physical culture and sport ideals, values and traditions; application of traditional and alternative methods aimed at correction of psychophysical conditions of students, opening of individual potential, development of reflexive consciousness, individuality and identity, manifestation of self-respect, orientation to I-concept of individual, birth of new self-estimation; inculcation of psycho hygiene skills, self-massage, eupnoea, application of voga elements, self-defense actions, methods of physical development and health improvement in everyday life; acquisition of additional knowledge in the sphere of philosophy of self-development, biology, physiology, psychology, pedagogic, physical culture; theoretical and practical mastering of self-defense methods, rendering first medical aid, mastering of personal and social safety in extreme cases.

During the experiment students of this group showed more clearly evidenced statistically reliable improvements in physical development, physical preparedness, motion activity and physical labor activity than students of control group. Eight tests (total number of tests was nine) confirmed real differences between experimental and control groups of girls at the end of the experiment, namely: in 30 m and 1000 m race, 3000 m race walking, jump over the rope, forward inclination of body, lift of body; flexion and extension of fixed hands in lying position, test of Rufye. So, the effectiveness of indicators' improvement according to the proposed system and technology of realization is equal to 89%. Six tests (from the total number of nine ones)

confirmed real differences between experimental and control groups of boys, namely: in 3000 m race walking, jump over the rope, forward inclination of body, body lift, flexion and extension of fixed hands in lying position, test of Rufye. So, the effectiveness of indicators' improvement according to the proposed system and technology realization is equal to 67%. Analysis of the data received verified positive tendency of emotional state of students. Thus, 14% of students from experimental course showed the lower rate of in-between state of anxiety. Correspondingly, 6% of total number of students showed the increased indicator of norm and 9% of students showed the increased indicator of pedagogical correction. Positive tendency appeared in the indicators of mental state of depression as well. 15% of students showed the lower rate of in-between state, considerable number of students (13%) showed the increased indicator in the sphere of pedagogical correction, and 3% – indicator of norm. On the contrary, there wasn't observed the tendency of indicators' improvement in control group of students which was trained in traditional manner.

Analysis of experimental material got by the SAM method (self-feeling, activity and mood) showed the improvement of emotional state of students. 54% of students felt better (from the original 32%), 22% of students felt unwell and this indicator was considerably less in comparison with the original (36%). However, 24% of students felt themselves as before uncomfortable at the lessons of physical culture. Students' activity increased from 48% of low level to 43% of middle level, i.e. satisfactory one.

In control group students began to feel better but not considerably – from 51% of low level to 45% of middle level, i.e. activity wasn't practically changed.

Analysis of comparative data shows that students of experimental group changed their attitude to physical culture; their motivation to this kind of activity in its self-developing direction became higher. The rate of students having negative attitude to the lessons of physical culture became three times less (from 34% to 12%). Number of students having the average level of attitude to such studies increased considerably (from 64% to 76%). There was recorded the increased number of students having the level of attitude high enough (from 2% to 8%). And 4% of students manifested the highest level. It means that in whole introduction of alternative methods of physical culture is accepted by students positively. Students' interest to physical culture studies became higher. They became interested in self-development, in themselves as individuals able to be realized in the chosen profession. This fact was confirmed by the data on

revealing students' ability to self-development. Considerable positive dynamics of students' ability to self-development was evident: average level dominated, sufficient one became higher (from 8% to 22% of students from experimental group). A small number of students manifested the highest level (4%) which was not revealed in the original data. These given results make possible to attribute pedagogical efficiency in the sphere of self-development to the introduction of alternative methods as in control group positive manifestations in this direction are isolated and barely perceptible. It could be especially mentioned some positive dynamics of selfdevelopment activity as the most important indicator of self-cultivation in the experimental group. The indicator of self-development activity levels for exposure of new program efficiency is sufficiently important as it reflects multi-aspect manifestation of individual "identity". Percentage wise positive dynamics was marked in indicators of all levels. A number of students with low level decreased considerably (from 54% to 30%). However, average level is dominated and students with the level high enough show a small rate (from 9% to 11%). And with it, the larger number of students with the indicator of average level comparing to those having low level suggests definite activation of considerable number of students in the sphere of selfdevelopment. In control group this kind of identity manifestation showed poor dynamics. It appeared to be unclaimed there. During the experiment special attention was given to the indicators which registered the dynamics of growth of social-moral individual qualities determining substantive essence and orientation of self-development. In this aspect the growth of moral choice stability appeared to be small. A number of students with low level indicator became less (for 7%). A number of students with high level indicator remained practically unchanged. And as before the dominant were the students with the average level indicator. The indicator of the highest level wasn't recorded at all. These data testify the indifferent students' attitude to the choice of the aim and essence of social-moral self-development. Choice response in problem situations is the evidence of this fact. In the experimental group it happens in situations of indirect suggestion and in the process of its realization. In control group reaction to the problems of self-development in the sphere of physical culture testifies this attitude. Such situation was confirmed by the indicators of competiveness as the important factor in selfrealization and self-identification. The results showed little decrease in number of students with low level in both groups. Nobody showed the highest level. Average and high enough levels remained practically unchanged. It is known that individual identity is defined by the personality

strength to a large extent. We revealed it by MMPi method (scale – personality strength). In the experimental group some dynamics of personality strength manifestation was recorded: the number of students participating in the experiment and having low level became less by 10%, the number of students with average level increased by 1%, some student manifested high level (9%). Personality traits are given according to the method of R. Cattel F-16, form C. Analysis of the received data showed the dynamics of individual traits manifestation. Thus, characterizing intellectual peculiarities according to R. Cattel's method data a large group of students (61%) had changes in abstract thinking, some students of the group (49%) acquired broaden imagination. The largest part of students (63%) manifested positive attitude to innovations. Some positive dynamics in emotional-volitional aspect was marked as well. Sufficient number of students (39%) demonstrated the growth of emotional stability, and the number of students having self-control became higher (47%). The character of communicative qualities was changed as well. The indicator of risk tendency increased in the group of considerable part of students (81%). More than half of students (65%) became more restrained and considerable part of students (59%) became self-reliant. Many students (49%) became more adaptable. Analysis of the received data allowed making several conclusions.

Conclusion

Introduction of new pedagogical system, new alternative methods optimized the process of students' physical training. Results of the experiment showed first of all the incentive growth to physical culture studies, the normalization of mental state of considerable part of university students. Sufficient level of individual physical development showed itself in health strengthening (low sickness rate) has been registered. Optimal development and strengthening of students' respiratory organs, growth of vital functions, relaxedness of motor skills, strengthening of body muscles, mobility of joints and spine has been marked. Mastering of health preservation and strengthening by means of muscle stretch, joints' gymnastics and self-massage has been demonstrated. More active attitude to healthy life-style has been shown. Physical studies attendance has become sufficiently better. During the academic year students of experimental group had been seldom ill with acute respiratory diseases (viral infection, influenza, diseases of throat, nose and ear). During the experimental period students of this group caught cold 596 times while the students of control group – 1007. In the experimental group average duration of disease was about 7,1 days, while in control group – 9,9 days. Number of students from

experimental group being often ill (3-4 times a year) was by 29,1% less than in control group. Pedagogical observations: improvement of definite traits of students, studying in the experimental group. Students have lost their timidity, uncertainty, shyness and inactivity. Discipline has become better, orderliness and independence have appeared as well as interest to physical exercise and willingness to be trained in sport classes. Such changes were not demonstrated in control group.

References

- Balsevich, V.K. (2006). *Intelligent vector of physical education in Russian schools*. Moscow: TyPE FKiS.
- Ivanov, Y.M. (1990). Yoga and psychotraining: Path to Physical Perfection and Cosmic Consciousness. Moscow: JV Lesinvest.
- Lubysheva, L.I. (2006). Sports Culture at School. Moscow: Theory and Practice FKiS.
- Mach, S.Y. (2008). *Self-defense in the formation of personal safety strategies: monograph*. Orel: Orel State Technical University.
- Makeeva, V.S., Kunitsyn, A.D., & Vucheva, V. (2004). *Health-improving and Recreational Physical Culture: tutorial*. Orel: Orel PH.
- Manzheley, I.V. (2007). *Pedagogical model of physical education*. Chelyabinsk: South Ural Book Publishers.
- Marchenko, E.D. (2011). *Benefit from fear. Introduction to Pedagogy of Joy*. St. Petersburg: Author Center "Radast".
- Novoselov, A.S., & Opletin, A.A. (2007). Self-development of the individual student's non-traditional methods of physical training: Guide for independent work of students and teachers. Perm: SPb IVESEP.
- Novosyolov, A.S., Opletin, A.A., & Titova, L.A. (2003). *Diagnostics of self-developing activity in the educational process (pedagogical aspect)*. Perm: PSPU Publishing House.
- Opletin, A.A. (2008). *Pedagogical bases of social and moral self-identity of student (on the basis of physical education): monograph.* Perm: SPb IVESEP.
- Opletin, A.A. (2009). System of universal workout at the lessons of physical culture in the context of self-development of students: Tutorial. Perm: PGPU Publishing House.
- Zagvyazinsky, V.I. (2000). Real humanism and trends of development of education. *Education and Science*, 1, 10-15.