LOOK ACADEMIC PUBLISHERS
OPEN ACCESS

IEJME— MATHEMATICS EDUCATION
2016, VOL.11, NO. 10, 3487-3510

Students' Readiness Formation for Realization of the Continuity Principle in the Development of Children's Physical Qualities

Galina Vyacheslavovna Ilyina,[a] Elena Nikolaevna Rashchikulina,[a] Galina Vitalevna Tuguleva,[a] Larisa Anatolevna Yakovleva[a]

[a] *Nosov Magnitogorsk State Technical University, Magnitogorsk, RUSSIA*

ABSTRACT

This paper justifies the need for professional training of students in continuous physical education of younger generation in the context of the basic guidelines: accented development of physical qualities; training of physical actions; up-bringing and learning. The leading idea of the appropriate training of students is improving vocational and pedagogical thinking of future professionals to development of physical qualities of children in continuous sports activities. The model of students' readiness formation is developed for the realization of the continuity principle in the development of children's physical qualities; the implementation of this model will allow improving efficiency of vocational and pedagogical training of students in terms of continuing education. Pedagogical conditions of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities are designated. The article provides a technique for implementation of pedagogical conditions of students' readiness formation to implement the continuity principle in the development of children's physical qualities.

KEYWORDS

continuing education, principle of continuity, sports activities, children's physical qualities, readiness for professional activity

ARTICLE HISTORY

Received:22 September 2016
Revised:24 October 2016
Accepted:22 November 2016

Introduction

1. 1 Introduce the Problem

Questions for full personality development in the educational system are widely discussed in the modern educational situation. With respect thereto, requirements specified by the society for the corresponding personnel structure, to the level of its professional competence under continuing education of the personality raise in the conditions of the third generation standards.

Today issues surrounding health weakening of future first-graders sound especially sharply which reasons are decrease in physical activity of preschool

CORRESPONDENCE Galina Vyacheslavovna Ilyina ✉ galinka_ilina@rambler.ru

children, academic load increase connected with children's training for studying at school. In this regard, the need for implementation by teachers of technologies directed to enrichment of motive experience and development of physical qualities of preschool children which promotes successful adaptation of children to multidirectional loadings of schooling increases.

It is important to bear in mind modern approaches to the realization of the continuity principle in sports activities of preschool and primary school children in conjunction with its guidelines: accented development of physical qualities; physical actions training; training and education taking into account preserving full-fledged physical and mental health of children in continuing education.

Research hypothesis: process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities will be more effective if:

1. Model of process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities was developed and implemented;
2. Within this model the complex of pedagogical conditions is implemented: Formation of the value-motivational relation to implement health saving technologies of education in students; to use the problem developing exercises system to activate creative and reflexive potential of students, to understand additional unity of intellectual and physical development of children; to improve vocational and pedagogical thinking of students in implementation process of the special course "Sports activities of children in continuing education".

1. Integrative unity of the activity, personal oriented, competence-based and reflexive approaches of education should be used to build the model process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities as methodological procedures.

2. Indicative basis of the successful implementation of the process model of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities are the following principles of: systemacity; continuity; complementarity; self-development.

3. The pedagogical conditions promoting implementation of this model and effective students' readiness formation for the realization of the continuity principle in the development of children's physical qualities: formation of the value-motivational relation to implementation of health saving technologies of education in students; use of the problem developing exercises system to activate creative and reflexive potential of students, to understand additional unity of intellectual and physical development of children; improving vocational and pedagogical thinking of students in implementation process of the special course "Sports activities of children in the continuing education".

4. Technological support of students' training formation for the realization of the continuity principle in the development of children's physical qualities shall include the modern developing technologies that provide development of value-motivational, theoretical, professional and practical components of professional readiness for implementation of sports activities of children in terms of continuing education.

According to the formulated hypothesis, the research formulated the following tasks:

- To reveal a status of the researched problem in the pedagogical theory and practice of education, to determine perspective approaches to its decision, to

specify a conceptual framework of the research.

- To prove inclusively components of the model process of students' readiness formation for the realization of the continuity principle in the development of physical qualities of preschool and primary school children.
- To prove theoretically and to check experimentally the pedagogical condition complex that promotes increase in efficiency of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities within the developed model.
- To develop and implement scientific and methodical providing of the process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities;

1.2 Explore Importance of the Problem

In the current context of professional training of teachers to development of physical qualities of children in continuous sports activities it is important to consider the main objectives and reference points (developing a base to improve physical and spiritual health of citizens since the earliest stages of individual development) provided in documents: National Doctrine of Education in the Russian Federation till 2025, Strategy of development of physical culture and sport in the Russian Federation for the period till 2020 and etc.

However, traditional approaches to professional training of future teachers in higher education institutions do not provide the adequate level of their professional competence for the realization of the continuity principle in the development of children's physical qualities in the conditions of continuing education.

It is necessary to state the deep contradiction between the need to provide a continuity of sports activities of preschool and junior school children and obviously insufficient reflection of succession in process of physical qualities of children at different steps of education in professional training of future teachers. This contradiction determined the problem of the research that consists in search and scientific and methodical reasons for the effective process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities.

Research object is professional training of students in the higher education institution.

Research question is the process of students' readiness formation for the realization of the continuity principle in the development of physical qualities of preschool children and younger school students during the professional training in the higher education institution.

The research goal involves theoretical development, reasons and experimental check of the process model of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities.

1.3 Describe Relevant Scholarship

Provisions of research theories of readiness formation bases of future specialists of physical culture for professional activity of Yu.D. Jeleznyak, N.N. Kozhukhov, E.A. Mitin, S.O. Filippova, T.A. Markina, S.D. Neverkovich and others were considered in the research.

Theoretical regulations on physical training and development of preschool and primary school children provided in works of Guzhalovsky A.A., Zdanevich A.A., Keneman A.V., Coffman N.F., Lubysheva L.I., Makarenko V.G., Popova G.G., Sharmanova S.B., YU. K., Chernyshenko, etc. are studied.

Succession considerations of preschool and primary education provided in works of L.S. Vygotsky, L.A. Wenger, A.V. Zaporozhets, E.E. Kravtsova etc. are analyzed. Recent studies of T.A. Erakhtina, E.N. Rashchikulina, L.A. Savenkova, L.V. Trubaychuk, L.N. Uvarova and others which confirm that continuity as a principle provides interrelation of all those involved in the educational process.

The research highlights vocational and pedagogical training of the teacher for implementation of the succession principle in process of physical qualities of preschool and primary school children. With respect thereto, the researches devoted to vocational and pedagogical training of future teachers have the special importance for this work: theoretical provisions of the person-centered approach (E.V. Bondarevskaya, A.N. Sergeyev, V.A. Slastenin, A.V. Petrovsky, I.S. Yakimanskaya, etc.); the activity approach (V.A. Belikov, V.V. Davydov, A.N. Leontyev, S.L. Rubenstein, B.M. Teplov, D.B. Elkonin); the competence-based approach (E.F. Zeer, A.M. Novikov, A.V. Hutirskaya); the reflexive approach (G.G. Granatov, G.M. Schedrovitsky, A.Ya. Nayn, N.Ya. Saygushev); psychology and pedagogical bases of professional activity (O.A. Abdullina, I.E. Klimova, N.V. Kuzmina, T.A. Markina, S.D. Neverkovich); provisions of the theory and technique of physical training and development of preschool children and younger school students (A.A. Guzhalovsky, A.A. Zdanevich, A.V. Keneman, N.F. Coffman, L.I. Lubysheva, A.A. Matveev, D.K. Hukhlayeva, Yu.K. Chernyshenko); development concepts of a child identity of preschool and primary school age L.S. Vygotsky, L.A. Wenger, A.V. Zaporozhets, E.E. Kravtsova); provisions of the scientific theory in implementation of the succession principle of the preschool and primary general education (T.A. Erakhtina, E.N. Rashchikulina, L.V. Trubaychuk and others); healthy lifestyle concepts (T.V. Kruzhilina, T.F. Orekhova, etc.).

1.4 State Hypotheses and Their Correspondence to Research Design

Substantial basis of the concept "readiness for professional activity" is: orientation to professional development; assessment and, if necessary, correction of the actions which is characterized by steady professional motivation, ability to control the actions, knowledge of features and ways of implementation of professional activities, professional readiness self-assessment.

Thus, the authors consider students' readiness formation for the realization of the continuity principle in the development of children's physical qualities as the result of professional training based on professional competence of future teachers to ensure integrity and continuity in development of physical qualities of preschool children and younger school students.

The analysis of modern approaches to the realization of the continuity principle in sports activities of preschool and primary school children is carried out in conjunction with its guidelines: accented development of physical qualities; physical actions training; learning and education taking into account preserving full-fledged physical and mental health of children in continuing education.

With respect thereto, future teachers of preschool and elementary school shall consider development of physical qualities of children as a two-sided process wherein, on the one hand, the preschool stage keeps intrinsic value of preschool age, forms fundamental personal qualities, develops physical capabilities of children taking into account their age and specific features that allow adapting successfully to school loadings; on the other hand, the elementary school (making use of experience of the early childhood education) contributes to further development of the specified level of physical qualities, achievements of a preschool child, personal formation.

In this research "the continuity principle" is considered in terms of compliance with goals, tasks, contents, methods, forms of sports activities on the stages of the preschool and primary general education aimed to provide integrity and continuity in development of physical qualities of children.

Determining essence of the concept "physical qualities", the authors emphasize that inherited morphofunctional qualities which develop in the course of physical training by means of physical exercises are in its basis. They consider them as the base for physical capabilities which are determined by set of human opportunities providing successful motor performance. This is force, dexterity, speed, endurance, flexibility.

The authors developed parameters of the continuity principle in the development of physical qualities of preschool children and younger school students based on additional unity nature-aligned and culture-congruent components that include age related, morphofunctional features and psychological new growths taking into account goals, means, methods of development of physical qualities of children (Ilyina, 2014).

Nature-aligned components include morphofunctional features of physical development, development features of physical qualities, psychological new growths of senior preschool children and younger school students.

1. Morphofunctional features of physical development of the senior preschool children are determined by the period of "the first traction"; permanency of cervical and chest curvature; sensitivity of the vertebral column to the deforming impacts; ossification of basic bones of nasal septum; poor development of sinews, bands, chorda, elasticity and flexibility of a bone; preferential development of large muscle groups, prevalence of the flexor-muscle tone over the extensor-muscle tone. Younger school students' backbone has the greatest mobility; the musculoskeletal system was not formed therefore it is necessary to avoid unilateral impact and exercises of static nature.

2. Features of development of physical qualities of the senior preschool children and younger students are determined by: *speed* of reaction to a mobile object and choice reaction that is shown in relays, outdoor games; *dexterity* in approved and consecutive fulfillment of the physical exercise complex, keenness, initiative in unexpectedly changing conditions in outdoor games using spatial and temporary orientations; good reaction of CVS to short-term *high-speed and power* loadings while performing running, jumping, throwing, gymnastic ladder climbing exercises; great opportunities in general *endurance* performing taking into account amount and intensity of exercises against lassitude which overdose is liable to damage to growth processes;

flexibility of the musculoskeletal system, especially the backbone, plasticity due to gradual amount and intensity of exercises.

3. Psychological new growths at the senior preschool children: randomness, reflection elements, elements of learning activities; completion of differentiation of nervous elements in three layers (associative areas) wherein processes determining success of difficult mental efforts are performed (generalization, awareness of the sequence of events and cause-effect relationship, interanalyzer connections formation). Game is the leading activity. At younger school students: reflection, change of the leading play activity to educational; development and alteration of mental processes continues.

Culture-congruent components include: a goal, means, methods of development of physical qualities of the senior preschool children and younger school students.

1. Goal: physical readiness of children for school training with the focus on health saving technologies. Expansion of individual mobile experience of a child, phased training to main movements. Younger school students have emphasis on the solution of educational tasks, the mastery of technique of the basic movements, formation of the basic knowledge of the healthy lifestyle. Education of moral and strong-willed qualities at children.

2. Tools of physical qualities developing: physical exercises and outdoor games realized in combination of different forms of sports activities with cognitive, musical, art and aesthetic activity.

3. Play, repeat, competition are leading methods of physical qualities developing in the senior preschool children and younger students.

Students' readiness formation for the realization of the continuity principle in the development of children's physical qualities forms based on the integrative unity of the activity, personal-oriented, competence-based and reflexive approaches of education. Systemicity; succession; additionality; self-development principles are the basis of the integrative combination of methodological approaches.

Value-motivational, theoretical and professional-practice components are the main substantive aspects of the vocational and pedagogical preparation quality of students, future teachers, to implement the continuity principle in the development of children's physical qualities.

The value-motivational component of students' readiness formation for the realization of the continuity principle in the development of physical qualities of senior preschool children and younger students is determined by the value-motivational relation to the implementation of health-saving technologies in continuing education (Rashchikulina, 2015).

The authors represented the theoretical component of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities in the integrative unity of inter- and intrasubject connections taking into account the basic concepts formation (Yakovleva, 2015).

The professional-practice component of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities includes the following:

- Gnostic skills to detect physical and psychological readiness of preschool children in view of the standard requirements of the preschool educational establishment (PEE) and the elementary school; to determine the best tools to develop physical qualities and cognitive abilities of children, taking into account their continuing development.

- Organizational skills to organize team works of preschool children and younger students in the course of joint sport events; to fascinate and to intensify children's efforts; organize their own activities.
- Reflective skills to analyze levels of physical fitness at children; to provide data handling; to create and implement their own methods of development of children's physical qualities.
- Communication skills: easily and quickly to reach contact with children, their parents, colleagues in the course of professional activities; to provide guidance and enabling assessment of a child's physical readiness level at advices with parents, colleagues; to show his friendly attitude and sensitivity to children with different levels of physical fitness.
- Design skills to integrate the section "Physical development" with other educational areas; to select effective methods and tools of children's physical developments taking into account the continuity of their development; to design their own technologies of children's physical developments (complexes of action games, relays, exercises, etc.).
- Projecting skills: to plan sports activity with children taking into account the continuity of the PEE and the elementary school programs; to coordinate with other professionals their impact on children; to expect possible difficulties in work and to solve them; to stimulate creativity in children's physical developments.

In this survey, presented substantial components of students' readiness formation for the realization of the continuity principle in the development of physical qualities of preschool children and younger students define meaningful unit and are the fundamental basis for formation of key competences of future teachers.

The authors highlight the following key competencies in the aspect of students' readiness formation for the realization of the continuity principle in the development of physical qualities of preschool and primary school children.

- social (ability to develop the common educational space in the children's physical development jointly with everyone involved to the process of succession of preschool and primary school education);
- communicative (ability to build relations with children, their parents, colleagues on the basis of cooperation and dialogue in arrangement of leading forms of sports activity of the senior preschool and primary school children);
- information (knowledge of modern information technologies that allow optimizing the reflexive control by the children's physical development; training, public speaking at scientific conferences devoted to physical education problems, implementation of health saving technologies in the lifelong education);
- cognitive (implementation of additional interaction of cognition and self-awareness, focus on self-development, self-education);
- special (formation of professionally significant qualities of future specialists to the children's physical developments in continuing education under the Federal State Educational Standard to the basic pre-school general education curriculum).

The authors have emphasized, theoretically substantiated and experimentally verified a set of organizational and pedagogical conditions that effectively influences students' readiness formation for the realization of the continuity principle in the development of physical qualities of senior preschool

and primary school children: the development of value-motivational relation of students to the implementation of health saving technologies in continuing education; usage of problem-developing exercises to enhance the creative and reflexive potential of students, understanding additional integrity of the intellectual and physical development of children (Ilyina, 2015); improving vocational and pedagogical thinking of students in the implementation of the special course "Sports activity of children in continuing education."

Theoretical grounds of student's value-motivational relations developing to the implementation of health saving technologies in continuing education and self-education are marked in many modern concepts that define the essential basis of health, its saving and the healthy lifestyle. In the research, this condition was carried out based on three preparation stages for students in special courses: "Basic movements and action games", "Combined developing exercises of sports activity of preschool children", "Aerobics in PEO", "Mastering the technique of physical actions," "Physical education", "Teaching and medical supervision of sports activities of preschoolers." To implement this provision the authors considered: special action preparation of students to master the technique of the basic movements; aiming for improve their own level of physical fitness; ability to diagnose their own physical fitness, to analyze and to build work on children's physical developments; students involvement (of the1st-3rd years) in arrangement of various forms of sports activities of preschool children; management of sports events (leisure and holidays) associated with formation of children's knowledge about their health, forms and functions of their bodies by the students of 4-5th years, to engage in sports activities (with the participation of children, their parents, teachers); public speaking at scientific conferences on the implementation of health saving technologies in continuing education.

The second condition is connected with usage of programmed exercise to enhance the creative and reflexive potential of students, to activate creative and reflexive potential of students, to understand additional unity of intellectual and physical development of children. Its implementation will allow students understanding the inner psychological-pedagogical mechanism of physical developments of the senior preschool and primary school age. One should mention E.N. Raschikulina's survey (Rashchikulina, 2016) associated with the algorithm designing of problem-developing exercises for students that was considered in the development of programmed exercises ("Physical qualities", "Future experts of physical training readiness for the principle of succession implementation in development of physical qualities of senior preschool and primary school children", etc.). These exercises allow knowledge-based self-assessment determining the actual level of students' readiness formation for the realization of the continuity principle in the development of physical qualities of senior preschool and primary school children.

The third condition involves the implementation of a special course "Sports activity of children in continuing education of children" based on the Teaching Materials (TM) (Ilyina, 2015). The course defines goals, objectives, content units, leading tools, methods, forms for children's physical targeted developments in continuing education.

The authors list content units developed by them:

1. Child's physical readiness for schooling. This section defines the basic concepts of the course; provides leading forms of sports activities for children;

explains physical readiness of a child for schooling and the appropriate diagnostic tools.

2. Principle of succession in development of physical qualities of children. This section describes approaches to the "physical qualities" concept. The parameters of the succession in development of physical qualities of children, leading methods and tools for their development taking into account the asymmetrical harmony of physical and cognitive areas of personality (Levshina, 2016). The authors considered problem-developing exercises according to G.V. Tuguleva (Rashchikulina, 2015), used techniques of motivation of cognitive activity that increase impact on a child's personality in development of physical qualities in outdoor games, relays.

3. Professional competence of teachers in the aspect of the continuity principle in development of physical qualities of children. This section presents the relevant key competencies of students and ways of their formation in particular; programmed exercise, creative tasks.

Experimental study of the conditions outlined above is presented in the monograph by G.V. Ilyina in detail (Ilyina, 2015).

Thus, the process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities is a purposeful professional training based on the integrative unity of value-motivational, theoretical and professional practical components taking into account inter- and intra-subject connections in forming of basic concepts, working knowledges and ensuring skills of integrity and continuity in the physical development of preschool and primary school children.

The authors have developed the process model of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities as a diagram of the strategic design of this process; the method of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities taking into account forms, methods, tools, techniques, training stages (Ilyina, 2015). In implementation of this model, it is important to note the phased students' readiness formation for the realization of the continuity principle in the development of children's physical qualities in the following substantial components:

- Value-motivational (special action training of students to mastering of modern health saving technologies in the lifelong education, in courses "Basic movements and action games", "Combined developing exercises of sports activity of preschool children", "Aerobics in PEE", "Mastering the technique of physical actions," "Physical education", "Teaching and medical supervision of sports activities of preschoolers"; encouraging of students of the1st-3rd years to work with children through demonstration physical training lessons, leisure, holidays in kindergartens and elementary schools; sporting and mass participation events providing aimed at formation of children's knowledge about their health, forms and functions of their bodies by students of 4-5th years, engaging in sports activities (with the participation of children, their parents, teachers). Students public speaking at scientific conferences devoted to the problems of physical education, the implementation of health saving technologies in the lifelong education;

- Theoretical (knowledge presented in the integrative unity and inter and intrasubject connections taking into account formation of basic concepts:

"Principle of continuity"; "Physical qualities"; "Readiness of students"; taking into account types of connections (preceding, accompanying, following); using problem-developing exercises "physical quality", "Relationship of additional unity of intellectual and physical development of the senior preschool and primary school children", designing of combined movements complexes and outdoor games that allow students understanding the inner psychological-pedagogical mechanism of the children's physical development, form their readiness formation for the realization of the continuity principle in the development of children's physical qualities in terms of continuing education;

- Professional and practical (practical skills at students are formed in the lab practicals of the discipline "Theory and methods of physical education and development of the child", "Basic movements and action games", "Combined developing exercises of sports activity of preschool children", "Aerobics in PEE", "Organization of acrobatics classes in PEO"; pedagogical practice in the SVE system, production practices on specialization" Instructor of physical training in PEE ").

Methods

2.1. Identify Subsections

Experimental work on the students' readiness formation for the realization of the continuity principle in the development of children's physical qualities was carried out in the following directions:

1. Studying the problem of students corresponding readiness formation (of faculties of preschool education, pedagogy and methodology of primary education) to development of physical qualities of preschool and junior school children.

2. Learning readiness of preschool institutions and primary school teachers to implement the principle of continuity in development of physical qualities of children.

The following objectives were set during the experiment:

- To develop estimating and criteria system to monitor the students and teachers' readiness formation for the realization of the continuity principle in the development of children's physical qualities is developed and implemented.
- To determine the state of the students and teachers' readiness formation for the realization of the continuity principle in the development of physical qualities of preschool and primary school children.
- To develop pedagogical maintenance of forming of students' appropriate readiness in terms of selected pedagogical conditions.
- To test impact effectiveness of the selected pedagogical conditions in the framework of the model developed in the process under study by experiment; to evaluate results of the experimental work using the chosen methods: analysis; synthesis, methods of mathematical and statistical processing of materials; visual presentation of the experimental results.

During the experimental work the authors used methods of study of the educational experience, observation, questioning, testing, individual and group interviews with teachers and students, test sample surveys, modeling, ranking, methods of mathematical statistics. In this experimental study, the authors

tried to vary and measure controlled conditions and intensity of factors that influence final results.

2.2 Participant (Subject) Characteristics

The experimental study of students' readiness formation for development of physical qualities of preschool and junior school children was conducted for three interconnected stages, at the Department of preschool education FSFEI Magnitogorsk State Technical University named after G.I. Nosov. 420 students of intramural and extramural study forms; 350 preschool teachers of Magnitogorsk and Zlatoust, 156 teachers of primary education of Magnitogorsk; 480 children at the ages from 6.5 to 8 years participated; main specialists of Preschool Education Management and Center for Professional Development and Methodical Work of Magnitogorsk, 8 heads of preschool institutions (12, 139, 160, 165) and educational schools of the city (No. 8, 61, 64, NSEE SGS No. 1) 156 teachers of preschool and primary education of Magnitogorsk were involved at different stages of the experiment.

The goal of the experimental work was in effectiveness impact on the selected pedagogical conditions, within the developed model, to the process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities.

Synthesis and analysis of preconditions for students' readiness formation for the realization of the continuity principle in the development of children's physical qualities allowed identifying criteria that give the objective assessment to levels of mastery by students: basic concepts (the continuity principle, physical qualities); diagnostic tools of physical readiness of children for schooling; professional competences of students. Value-motivational, theoretical and professional and practical components were criteria. Estimating and criteria system was developed to monitor the students and teachers' readiness formation for the realization of the continuity principle in the development of children's physical qualities is developed and implemented (Ilyina, 2015).

The results obtained in the ascertaining stage of the experiment showed that 75% of the students think to solve the primacy health-improvement problem in the course of physical education of preschool and primary school children. Only 23% of them define the high importance of the realization of the continuity in the development of physical qualities at senior preschool children, primary school children. 12% of the students may to formulate educational and training objectives of the physical education of preschool children. 16% of the students could to assess objectively their level of physical development, 84% could not answer this question. 13% of students know effective methods of the physical development of senior preschool and junior school children. 93% of respondents were not able to estimate their professional skills to promote development of physical, moral and volitional qualities of preschool and junior school children. The question on diagnostics of children's physical fitness for schooling caused difficulties at 92% of the respondents, 53% of students underestimate the importance of action games using as an effective mean of physical development of preschool and junior school children. Interaction of mental processes and physical qualities of children is not familiar to most students (96%). In particular, student self-esteem was the most important at the ascertaining stage but also mutual evaluations and evaluation of a teacher were

considered at later stages of the experiment (a maximum point received by a student is 33).

The authors emphasize importance to improve readiness of teachers of preschool and primary education to implement the succession principle in children's physical development. Questionnaires "Level detection of professional readiness of preschool and primary general education teachers to implement the continuity principle in physical development of preschool and junior school children" and testing were provided in the course of the research to determine the level of readiness of preschool and primary education teachers to implementation of the continuity principle in children's physical development [3]. The questionnaires revealed a problem of insufficient professional competence of preschool and primary education teachers to the realization of the principle of continuity in the physical qualities of children's development. The authors note that the questionnaires were used twice.
In particular, self-esteem of general preschool education teachers was the most important at the ascertaining step, and mutual evaluation of colleagues was also considered at the late stages of the experiment. The maximum point scored by a teacher of preschool education was 33. The authors also carried out diagnostics of physical readiness of preschool education teacher themselves that define competence of teachers to carry out diagnostics of physical readiness of children for schooling in addition to the questionnaires described above at this stage of the experiment.

As a result of the ascertaining experiment the authors made the following conclusions:

- The resulting data suggest existence of the problem in preschool education;
- the teachers' readiness level for the realization of the continuity principle in development of physical qualities of children remains high enough in traditional updating conditions of the professional training of preschool and primary general education teachers under the investigated direction;
- methodological support of the improving process of the professional training of preschool and primary general education teachers to the realization of the continuity principle in children's physical development is required.

In this regard, the authors developed teaching and learning support of the process of the realization of the continuity principle in the development of physical qualities of senior preschool and junior school children that includes: monographs: "Physical development of preschool children in continuous sports activity", "Continuing education during childhood", "Development of a child in preschool and primary education"; "Students' readiness formation for the realization of continuous sports activity of children," TM "Sports activity of children in lifelong education"; manuals: "Integrated subject planning of sports activity of preschool children", "Features of sports activities planning of young and preschool children", "Theory and technology of physical education and development of early childhood," et al., which raise a level of professional competence of preschool education teachers to the realization of the continuity principle in development of physical qualities of preschool and junior school children. Criteria and levels of children's physical readiness for schooling are presented in these textbooks.

During the educational experiment experimental groups of preschool teachers participated in Continuing Education Courses for the purpose of

formation of professional readiness to the realization of the continuity principle in children's physical developments. Courses are organized on the basis of Institute of additional vocational training of MSTU "Horizon" (Magnitogorsk State Technical University named after G.I. Nosov). Number of preschool teachers in the experimental groups is 51 people, and in the control groups - 49 people. Control groups (K1, K2) consist of preschool teachers (NSEE SGS No. 1, School № 8, 61, 64) working in the kindergarten-elementary school system. Experimental groups (E1, 2) consist of teachers of preschool educational establishments No. 12, 97, 139, 165 of Magnitogorsk. The control groups raised their skill level in the course of self-studying of methodical literatures that contribute to effective realization of the continuity principle in children's physical developments.

Comparative analysis of the educational experiment results in view of Continuing Education Courses for preschool teachers to the realization of the continuity principle in children's physical developments showed the significant difference in the results of the control and experimental groups. It should be noted that readiness levels of preschool teachers to the realization of the continuity principle in children's physical developments were determined based on tasks execution aimed at development of all three components of readiness for the realization of the continuity principle in children's physical developments. At the same time preschool teachers were at the low level of readiness, the percentage of all tasks correctness up to 60%, the average level of readiness is 61-85%, higher is 86-100%. This allows drawing conclusion about the positive impact of Continuing Education Courses on the level of professional readiness of preschool teachers for the realization of the continuity principle in the development of the physical qualities of senior preschool and junior school children.

Provisions of the hypotheses were tested during the educational stage in view of efficiency testing of the selected pedagogical conditions, within the developed model, to the process of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities.

Following pedagogical conditions were introduced in the model in three stages: the development of value-motivational relation of students to implementation of health saving technologies; use of the problem developing exercises system to understand additional unity of intellectual and physical development of children, improving vocational and pedagogical thinking of students in the implementation of the special course "Sports activity of children in continuing education." Comparative analysis of the educational experiment results in view of introduction to the process model of pedagogical conditions showed the significant difference in the results of the control and experimental groups. To prove the hypothesis of the educational experiment the authors used a nonparametric test  (chi-square). Based on the calculated data given in the E1, E2 the alternative hypothesis (H_i) is provided as $\chi^2_{observe} > \chi^2_{criterion}$ (By a value-motivational component 11,17> 5.99, 11.85> 5.99, by theoretical 9.43> 5.99, 9.87> 5.99, by professional-practical 13,38> 5,99, 10.81> 5.99). This allowed drawing conclusion about influence of the pedagogical conditions system in the developed process model of students' readiness formation to the development of physical qualities of preschool and junior school children (Ilyina, 2015).

Thus, the main objective is to study influence effectiveness of selected pedagogical conditions in the framework of this model on the process of the realization of the continuity principle in the development of children's physical qualities is achieved and the hypothesis is confirmed.

Results and discussion

Developing the above mentioned ideas in the study: the criterial assessment system was developed to monitor readiness of students and teachers to implement the continuity principle in development of physical qualities of children; the technique of students' readiness formation for the realization of the continuity principle in the development of children's physical qualities taking into account forms, methods, tools, techniques, training stages; problem-developing exercises for students and teachers "Physical qualities", "Students' readiness formation for the realization of the continuity principle in the development of physical qualities of preschool and junior school children" are provided, the questionnaire for teachers.

Test-task No.1

Determining of an actual level of the students' and teachers' professional readiness for the realization of the continuity principle in development of physical qualities of preschool and junior school children.

The test-task is offered to pass twice for students, at the beginning and upon completion of the course. Upon answers on the questions of the questionnaire-test students need to evaluate degree of their knowledge, skills and personal qualities on a scale of 1 - 4.

1 point - a low level, it is not shown.

2 points - an average level, it appears, insufficiently positive.

3 points - above average, the estimated quality is the basis for a creative research.

4 points - the highest level, the estimated quality is culture of learning and self-knowing.

№	Question	Grades 1 2 3 4
1	What extent do you think to solve the primacy health-improvement problem in the course of physical education of preschool and primary school children?	
2	What extent do you define the importance of the realization of the continuity principle in the development of physical qualities at senior preschool children, primary school children to?	
3	How clearly can you formulate educational and training objectives of the physical education of preschool children?	
4	Please estimate your level of physical development.	
5	What extent do you know effective methods of the physical development of senior preschool and junior school children to?	
6	How do you assess your professional skills to promote the physical development of preschool and junior school children?	
7	How do you assess your ability to combine the development of physical, moral and volitional qualities of senior preschool	

	and junior school children?	
8	How do you assess your level of diagnostics of physical readiness of children to schooling?	
9	How do you possess the physical qualities characteristic of children taking into account means and methods of their development?	
10	How do you assess outdoor games using as means of the physical development of preschool, junior school children?	
11	Do you have knowledge of mental processes and physical qualities relation of children?	

Programmed Exercise No. 2 "Physical qualities"

Physical qualities	1	2	3	4	5	6	7	8
force								
flexibility								
rapidity								
dexterity								
endurance								

Note: mark a physical quality using * in each column referred to above in the following interpretations and characteristics:

1 - exercises of increased coordination complexity, containing a novelty element contribute to development of the quality;

2 - This quality is characterized by speed of responsive movement to any source;

3 - this quality means: "Ability to overcome external resistance or to counteract it by muscular tensions in motion actions";

4 - this quality is the basis for other qualities at senior preschool children;

5 - play, competition, repeated are leading methods of this quality developing at senior preschool and junior school children;

6 - computer games, running from the start from different starting positions, movement in different stances, jumps rope help to develop this quality at senior preschool children;

7 - This quality is characterized by the functional resistance of nerve centers, functional coordination of skeletal system and internal organs;

8 - the quality selected by you develops during active and sports games from suddenly changing conditions (the selected exercises are efficiency as long as they performed automatically).

Programmed Exercise No. 3

"Students' and teachers' readiness formation for the realization of the continuity principle in the development of physical qualities of senior preschool and junior school children"

1. What is the essence of the realization of the continuity principle in the development of physical qualities of preschool and junior school children?

A) Continuous connection and coordination of various phases or stages of physical education that affect children's physical development.

B) The children's physical development that, what has been achieved at the previous stages, where the new is not simply eliminate the old and contains a rational, progressive part of it.

C) Relative repeat of the physical education process.

2. What purposes of realization of continuity of preschool and primary education?

A) Harmonious physical and mental development of a child, ensuring retention of his identity, adaption to changing social situations, readiness to teamwork.

B) Formation of the efficient methodical support for children's education.

C) Saving time consumption of all participants of interaction of preschool educational establishment and a primary school.

3. Identify priority areas for development of preschool and primary school children taking into account the continuity in the development of physical qualities:

A) Health promotion of children in development, their physical readiness for schooling.

B) Achievement by a child indicators of the physical development level corresponding to the biological age of a graduate of a pre-school room for school, physical fitness that allows successfully adapting to differently directed physical activities of primary school.

C) Child training to physical action technique.

4. What parameters do you need, in your opinion, to realize the continuity in the development of physical qualities at the senior preschool children, younger students?

A) Compliance in methods, means and forms of pedagogical activity in children's physical developments.

B) Complementary and matching of age and individual characteristics of children's development, as well as consistency of educational objectives, means, methods and forms of teaching.

B) Consistency of educational programs for physical education in preschool and elementary school.

5. What is readiness of experts of physical training to realization of continuity in the development of physical qualities of preschool children and younger school students?

A) It is a system of subjective estimates and judgments to solve the problem of continuity in children's physical developments.

B) This is student's emotional attitude for realization of compliance of preschool and primary general education for a child.

C) This is readiness as a result of targeted development of relevant knowledge and professional skills, based on the value-motivational relation to activity.

6. What does determine the system of leading motives and beliefs of student's personality, efficiently realizing the continuity in development of physical qualities of preschool children and younger school students?

A) By values of personal-oriented developing education and self-education.

B) Active participation in modern preschool and primary general education restructuring.

C) Necessity of their own professional growth.

7. What knowledge are necessary to experts of physical training to realization of continuity in the development of physical qualities of preschool children and younger school students?

A) The pedagogical knowledge system about children's physical developments.

B) Mainly psychological knowledge about specifics of the age and individual characteristics of senior preschool children, younger school students.

C) The methodological, psychological and pedagogical and methodological knowledge about the development of physical qualities, backed on the physiological characteristics of child developments.

8. Assess a level of your own readiness to realization of continuity in the development of physical qualities of preschool children and younger school students?

A) Low.

B) Average.

C) High.

The authors developed the estimating and criteria system to monitor the students' and teachers' readiness for realization of the continuity principle in the development of physical qualities of children.

The technique of students' readiness formation for realization of the continuity principle in the development of physical qualities of children taking into account forms, methods, tools, techniques, training stages is provided.

The topical nature of the problem under study is caused by the fact that in the conditions of modernization of the Russian education in the context of Bologna process and the implementation of the Federal State Educational Standards of the new generation, the formation of a student's self-developing personality is largely determined by a creative personality of the teacher in the light of modern requirements. In 2011-2012 academic year, Russian universities switched to the Federal State Educational Standards for higher professional education of the third generation. The main directions for the development of an innovative educational environment in universities are: providing sufficient numbers of teaching staff to support innovation processes in universities, forming the students' civil consciousness, motivating and stimulating the innovation potential of the teaching staff, strengthening the connection with the production process and employers in order to create conditions for a high quality educational process, etc. (Zakirjanova, 2013). The need for schools to switch to technologies focusing on the individualization of learning and self-realization of students is determined by the Government of the Russian Federation in the "Concept of Modernization of Russian Education for the Period up to 2010". Nowadays, this conceptual position is realized in the process of introducing the Federal State Educational Standards of the new generation. In particular, the modernization of teacher training educational programs in accordance with the Federal Educational Standards presupposes such conceptual approaches as the activity and competence based ones. The activity-based approach aims to provide practical orientation of professional education, strengthening the students' role and increasing their activeness and independence in the educational process. The competence-based approach enables students to develop professional competences, which allow them to successfully master an educational program (Mikhaylova et al., 2015).

By identifying and justifying the principles of regionalization, A.M. Tsyrulnikov identifies the following principles as the main ones: the principle of cultural-historical continuity and ethno-cultural focus, the principle of integrity, the principle of diversity and multicentredness, the principle of spherical organization, openness and dynamism. In particular, the implementation of the continuity principle and the ethno-cultural focus means the preservation and reproduction of the basic forms and mechanisms for the territorial and regional organization of education which have been developed and long-acting in the course of time, the creation of cultural analogues of the lost and new social and cultural forms and ways of life, which ensure the development of regional education in the context of cultural and historic practice

Continuity in the development of regional education is closely linked to the implementation of its ethno-cultural orientation, the preservation of national traditions, the development of education and the upbringing of nationalities and ethnic groups living on the territory of the region (Tsyrulnikov, 2007). From this perspective, the preservation and development of the ungraded and nomadic schools of the North is a determining factor of the national revival and further development of the small-numbered indigenous peoples, their ethnic identity and openness in the dialogue between the peoples' cultures in the multinational country. In this connection, the training of national teaching staff with an additional qualification of a "tutor" is viewed as imperative and is in high demand in the modern reality of life.

Currently, we do not yet have a developed regulatory framework for introducing tutoring in mass schools, there is no such position as a tutor in the organizational structure. However, in the context of school education, within the existing organizational structure, a teacher, a class master, a psychologist or a social worker can each provide students with tutoring support at their own level. The largely spontaneous practice existing in the system of Russian education requires thorough understanding as well as scientific and methodological grounding. In addition, this should be done with a view to organizing the effective training of teaching staff with an additional qualification of a "tutor" (Neustroev, 2013).

In particular, Professor Tatiana Mikhailovna Kovaleva, PhD in pedagogy and one of the initiators of the tutoring movement in Russia, offers five steps of tutoring support in primary school or elementary classes:

Step 1 is identifying and fixing a cognitive interest (you can use questionnaires, interviews or observations. It should be remembered that no matter how inconsistent or illogical this interest seems, it cannot be ignored so as not to alienate the child).

Step 2 is a map of cognitive interest (if a teacher works with answers, then a tutor uses questions. For example, a child wants to know how a giraffe sleeps and asks a question about this, "How does a giraffe sleep?" A teacher will just answer, "Standing", and a tutor will ask, "Where can we get information on how a giraffe sleeps?" and while creating a map of cognitive interest together with the student, the tutor will advise them to go the library, to the zoo or to look for some information about this on the Internet).

Step 3 is the collection of material (a portfolio). At this stage it is possible to identify the so-called "longspur" children who lag behind others and "money changers" who have no permanent interest as it changes every day. The essence of a tutor's support is to help the "longspurs" to catch up with the rest of the

pupils in class and to be able to convince the “money changers” to stay on one particular interest.

Step 4 is preparation for the presentation (parents can also be involved in this stage. The presentation itself can be in a digital form or on paper, i.e. it can be a poster, a newspaper, an album, etc.).

Step 5 is reflexive analysis (this is also an important phase in which the teacher sits down next to the child and they discuss the presentation: what worked well, and what failed. The possible causes of failure are identified: little material was collected, the information was not presented in an interesting way or perhaps other children were not interested in the topic (Mikhailova, 2010).

Thus, the main task of a tutor in primary school is to help each child to develop stable natural cognitive interests from spontaneous ones. It can also be concluded that in the early education system a teacher used to promote a subject, but in the education of the future a tutor supports a child’s interest in the subject. Overall, a tutor’s sphere of activity is to construct an individualized learning environment, to create “the practice of expanding the child’s own opportunities” using the material from the children’s real life (Dolgova, 2004).

On the other hand, in accordance with the requirements of the Federal State Educational Standards for general primary education, the educational process requires a child’s full development. This refers to the formation of a competence-based creative personality of a primary school pupil. At first glance, it often seems that parents are more interested in a child’s health and marks at schools, while a teacher is interested in a child’s activeness and progress, but what interests the child? How often do adults think that a child has their own internal desire to develop, grow, emulate them, or conversely, be quite different? What do they do for such self-development? Unfortunately, most often there happens realization of the adults’ unfulfilled desires... (Nikolaeva and Alexeev, 2015).

In the context of implementing the Federal State Educational Standards of the new generation, the modern school provides an opportunity for children to choose their own interest clubs, offering a great number of competitions at various levels and directions to demonstrate each child’s abilities, their development and improvement. The content and forms of organizing the integrated learning and educational activities in primary school project a specific type of students’ consciousness and thinking on the basis of an individual trajectory of each child’s development. As can be seen from the first results of implementing the ideas of the Federal State Educational Standards for primary general education (FSS, 2011), one can observe a transition of teachers and students from the knowledge-based paradigm of education to the creative, general intellectual development. There is an increase in children’s interest in the social world, history, culture, religion and the structure of society. Younger students become aware of themselves as members of society. They acquire a wider range of their native cultural values, as well as values of other peoples living together and those of the world community. Children participate in traditional folk festivals, rituals, religious activities, thereby turning to the spiritual culture of different peoples.

These initial positions allow us to justify the provision that tutoring as the individualization of teaching and education is particularly relevant in the conditions of the Republic of Sakha (Yakutia), where rural ungraded schools account for 63% of 537 secondary schools of the republic. Their characteristic

feature is a small number of pupils in schools, i.e. a small class size (5 to 12 students in one class on average). In the context of implementing the Federal State Educational Standards of the new generation for a student's creative personal development, a small number of students in a class, in our view, should become the benefit of rural ungraded and nomadic schools of the North. But in the context of a per capita school funding principle, this feature threatens the very functioning of these types of schools as "economically unviable". On the other hand, the lowest salaries of teachers in these types of schools (15-20 thousand rubles per month) do not encourage their fruitful work and do not contribute to the retention of the teaching staff. Staff turnover and shortage of teachers in rural ungraded schools of the North remain an acute problem, connected with the ungraded character and harsh conditions. In this regard, Federal Law No. 273 "On Education in the Russian Federation", article 22, clause 12 provides that "the decision about reorganization and liquidation of a municipal educational organization located in a rural settlement, is not allowed without taking into account the views of the residents of this rural settlement (FL No. 273-FZ, 2013).

From this perspective, it is a promising fact that M. Ammosov North-Eastern Federal University implements one of the main directions of its Strategic Development Program (2011-2020), i.e. providing innovative socio-economic and cultural development of the indigenous peoples of the North, based on their traditional lifestyles and ethno-national identity (Zakirjanova, 2013). Thus, since September 2012, Pedagogical Institute of North-Eastern Federal University has been implementing a new blended undergraduate program "Primary Education and Tutoring in General Ungraded and Nomadic Schools of the North". The basic educational program and curriculum of the new blended specialization in ungraded schools of the North are based on an innovative modular system of undergraduate education, including the following structural and content component modules: "Primary Education", "The Basics of Tutor Training", "The Philology and Culture of Small Numbered Indigenous Peoples of the North," "The Specific Features of Activity in Rural Ungraded and Nomadic Schools in Conditions of the North", "Psychological and Pedagogical Preparation", "Innovative Educational Technologies for Distance Learning", "Additional Profession-Oriented Subject", etc. (Nikolaeva et al., 2016; (Neustroev, 2016a, 2016b). At the end of the training course, these young primary school teachers with a supplementary specialization of a "tutor" will work on a contractual basis in rural ungraded and nomadic schools of the North. This ensures a teacher's erudition and mobility, an individual development path for each student, and at the same time this eliminates the shortage of teachers as a result of their narrow specialization (Neustroev, 2013).

In the process of training primary school teachers with an extra qualification of a "tutor" in terms of the new combined undergraduate course, we believe that tutoring is the best professional practice in Russian higher education. A tutor's sphere of activity is to construct an individualized learning environment, to create "the practice of expanding the child's own opportunities" using the material from the children's real life, to develop their subjectivity in the process of professional formation (Dolgova, 2004).

Consequently, it becomes reasonable to develop a model of a tutor's support of students, the key principles of which can be the following:

1) taking into account the needs and interests of the students in organizing the academic and educational environment of the University;

2) creating conditions for involving students in the process of self-development and self-actualization;

3) assisting the students in making value-related choices, personal and professional self-identification.

As future qualified specialists in the field of tutoring, students are intended to ensure the individual educational needs of their pupils are met, to carry out organizational help, consulting and other types of assistance in the development and implementation of their individual educational programs, tracks or projects. This makes it possible to expand and modernize a teacher's traditional functions, to bring them into compliance with the requirements of the time, with the educational demands of the society as well as with the state order (Deny and Potts, 1998; Menill et al, 1995).

When studying the social order for training the specialists of the educational system with the qualification of a "tutor" in 2008, the Interregional Association of Tutors interviewed pedagogical workers and students of pedagogical specialties. On the basis of this survey, it can be concluded that the development and implementation of professional teacher education programs, aimed at obtaining the qualification of a "tutor" present an urgent need, the satisfaction of which is in the interests of an individual, society and the state. It has been pointed out that educational programs do not specify the indicators of assessing the quality of training for teachers in order to give them an additional qualification of a "tutor" in accordance with the criteria of evaluating the effectiveness of education (Hedges, 2010; Turner, 1993; Hadlow and Hegarty, 2004).

Based on the identified problems and contradictions in the subsequent years work has been done in the following areas:

1) formalizing the requirements for activities of a tutor's support as the basis for developing the corresponding programs for professional education, including the additional ones.

2) collecting a data bank and an in-depth analysis of the existing practices of tutor training.

3) developing master's programs for tutor training.

4) clarifying the principles and models of tutor training in the system of additional professional education (Wood and Tanner , 2012; Morillas and Garrido, 2014; Turan et al., 2009).

It should be emphasized that the idea of universality of the new combined training program within a modular system in a multi-level educational system is understood by us more widely. This refers to the fact that having basic primary education and by changing the modules for various additional specialties, we have the mobility of variable teacher training, based on the republic's real need for teachers (e.g. "Primary Education + an additional qualification (educational process)", "Primary Education + Mathematics and Information Technology", "Primary Education + a foreign language", etc.) (Neustroev, 2013). This conceptual idea, in turn, constitutes a separate problem in the future, the question that needs to be addressed.

In this regard, it is encouraging to point out that the new law "On Education in the Russian Federation", considers the most important proposals from the Republic of Sakha (Yakutia) on the financing of rural ungraded schools

regardless of the small number of students, i.e. on the basis of actual costs, while teachers' salaries should not be lower than the wages of those employed in the sphere of economy in the subjects of the Russian Federation (FL No. 273-FZ, 2013).

Conclusion

The research results confirmed provisions of the hypothesis and allowed formulating general conclusions:

a) The authors developed the authors developed a process model of students' process model of students' readiness formation for realization of the continuity principle in the development of physical qualities of children, based on the principles of consistency, continuity, complementarity, self-education; it was developed taking into account the integrative unity of requirements of competence, activity, personal-oriented, reflective and methodological approaches; including targeted, meaningful, organizational and resultative units. Implementation of the model shall improve efficiency of professional-pedagogical preparation of students in the aspect of continuing education.

b) Theoretically substantiated and experimentally tested the complex of pedagogical conditions that contributes to the implementation of the model and the effective students' readiness formation for realization of the continuity principle in the development of physical qualities of children: the development of value-motivational relation of students to the implementation of health saving technologies in education; usage of problem-developing exercises to enhance the creative and reflexive potential of students, understanding additional integrity of the intellectual and physical development of children; enhancement of the professional-pedagogical thinking of students in the implementation of the special course "Sports activity of children in the lifelong education."

c) Students' readiness formation for realization of the continuity principle in the development of physical qualities of children and appropriate methodological support are developed, tested and implemented;

d) Materials and results of the study can be used in the continuing education system, as well as in preparation of professionals of preschool education in institutions of secondary and higher vocational education.

During the study its basic tasks were solved, theoretical and experimental data supporting the original hypothesis were received.

Further study of the research problem will contribute to improvement of professional and pedagogical training in the aspect of solving the problems of continuous sports activity of children - implemented in long distance education.

Acknowledgement

The authors are grateful to the Department of Education of Administration of Magnitogorsk, Chelyabinsk region represented by Natalia Vladimirovna Dorogina (Head of the Department of pre-school education), Nosov Magnitogorsk State Technical University represented by V.M. Kolokoltsev for the opportunity to study the students' readiness formation for the continuity principle realization in the development of physical qualities of children; Institute of additional vocational training of MSTU "Horizon" (Nosov Magnitogorsk State Technical University) represented by O.V. Ibragimova for the opportunity to improve professional readiness of teachers to the development of children's physical qualities aspect of the Continuing Education Courses; the

Department of Preschool Education of Zlatoust and N.V. Bugrinova, specialist of this Department; dean of the Preschool Education Faculty of Chelyabinsk State Pedagogical University, professor [**L.V.Trubaychuk**]; S.B. Sharmanova, Professor of the Theory and Methodology of Physical Education Faculty of Ural State University of Physical Culture, who supported the idea of continuous sports activity of children implementing with accentuated development of physical qualities and phase training to physical actions.

The authors express their gratitude to the heads of Magnitogorsk municipal preschools (No. 12, 139, 160, 165 and others) and educational schools of the city (№ 8, 61, 64, NSEE SGS 1, etc.) for cooperation in study of readiness of preschool and elementary school teachers to implement the principle of continuity in the development of physical qualities of children and test of pedagogical conditions of students' readiness formation for realization of the continuity principle in the development of physical qualities of preschool and primary school children.

Disclosure statement

No potential conflict of interest was reported by the authors.

Notes on contributors

Galina Vyacheslavovna Ilyina, Cand. of Sc. (Pedagogy), Associate Professor of Preschool Education Department, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia

Elena Nikolaevna Rashchikulina, PhD (Pedagogy) Professor, Department of Social Work and Psychological and Pedagogical Education, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia

Galina Vitalevna Tuguleva, Cand. of Sc. (Pedagogy), Associate Professor of Preschool Education Department, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia

Larisa Anatolevna Yakovleva Cand. of Sc. (Pedagogy), Associate Professor of Preschool Education Department, Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia

References

Ilyina, G. V. (2014). *Realization of the Continuity Principle in Physical Qualities Development of Preschool and Younger School Children*. Candidate Thesis in Pedagogy. Chelyabinsk State Pedagogical University, 150 p.

Ilyina, G.V. (2011). *Sports activity of children in continuing education: teaching materials*. Magnitogorsk: MaSU Press, 116 p.

Ilyina, G.V. (2015). *Development of physical qualities of preschool children in continuous sports activity*: monograph - Magnitogorsk: Nosov Magnitogorsk State Technical University Press, 401 p.

Levshina, N.I., Bagautdinova, S.F., Ilyina, G.V. (2016). Scientific and regulatory aspects of the integration of social and communicative and physical development of senior preschool children. *Preschool Education*, 10, 16-22 p.

Rashchikulina, E. N. Stepanova N.A., Tuguleva G.V., Ilyina G.V. (2016). Students' Training for the Realization of the Principle of Continuity in the Development of Children's Cognitive Abilities. *Indian Journal of Science and Technology,* October. 9(37), DOI: 10.17485/ijst/2016/v9i37/102174.

Ilyina, G. Rashchikulina, G.E. (2015). The physical development of children of preschool age in terms of continuing education. *Japanese Educational and Scientific Review*, Tokyo University Press, XI, 1(9) (January-June), pp 319-324.

Tuguleva, G. (2006). *Didactic Conditions of Continuity in Thinking Abilities Development of Preschool Children and Younger School Students.* Candidate Thesis in Pedagogy. Magnitogorsk State University, Russia, 177 p.

Yakovleva, L.A. (2015). Pedagogical conditions of students' ecological culture formation. In: Gnevek, O.V. (Ed.) *Psychological and pedagogical aspects of the research problems of higher education*: a monograph. Ufa: RIO ASTERNA, pp 135-158.