# ABSTARCT of PhD thesis on "Formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games" on specialty 6D010200 –Pedagogy and methods of primary educationperformed by Sarmantayev Ayan Saparovich

**Urgency of the thesis research**. The main goal of the State Program for the Development of Education and Science of the Republic of Kazakhstan for 2020-2025 is to increase the global competitiveness of Kazakhstani education and science, as well as to educate and train the individual based on the basis of human values."

In this regard, so far the main task of the education system is to develop and form a personality based on the national and human values, to create necessary conditions for its professional improvement, to preserve and improve the native language, national traditions, to promote health in the personality formationableto make right decisionsindependently and freely getting orientedbased on a deep knowledge, skills, abilities, and competencies acquired in accordance with the modern societyrequirements.Therefore, the formation and development of students'such qualities is considered as the most important task of the education system of the Republic of Kazakhstan.

The future of our country is people deeply acquainted with the national and human values, as well as being educated on the basis of folk pedagogy.

In the age of globalization, the value system takes special place, since spiritual and moral values are person's internal abilities, his desire for good, compassion towards others, mercy towards others, search for an adequate existence, self-respect and understanding the world. The main child's personality dimension is his focus on human values, benevolence, intelligence, creativity, activity, self-esteem, and thinking discretion.

It is the achievement of such goals that requires both the education content updating, and increasing the effectiveness of teaching methods and techniques, i.e. the formation of an inquisitive, active, and cognitive personality on the basis of activeteaching methods and techniques. Therefore, it is important to increase primarystudents' cognitive activity, as well as to improve their knowledge and skills.

The development of the younger generation's national customs and traditions, ethical skills through national games, especially the formation of a child's cognitive activity through games, is caused by the dictate of the times, since game is a means of raising a child's fidelity, love for the country, language, mentality, kindness, and morality from an early childhood. Therefore, the use of national games for educational purposes and search for effective ways to form a child's cognitive activity through national games is one of the aspects being relevant so far. The national physical games have great opportunities for the development of students' cognitive activity and improvement of culture and intellectual activity.

In this regard, the Government of the Republic of Kazakhstan has developed "Strategic Plan for the Comprehensive Development the Republic of Kazakhstan prior to 2025", the Law "On Education" in the Republic of Kazakhstan, "Comprehensive Program for Education in the Educational Institutions of the Republic of Kazakhstan", the keynote speech of the Leader of the Nation "Future

outlook: public conscience modernization", the article "Seven Facets of the Great Steppe", the book of the Leader of the Nation by N. Nazarbayev "The well-being of Kazakhstan people: Address to the Nation "Income and quality of life improvement" clearly shows that the national education is aimed to solve physical education problems among other things.

Such outstanding educators of the Kazakh peoples as A. Kunanbayev., I. Altynsarin., A. Baitursynov., M. Zhumabaev., and J. Aymautovs in their works attached great attention to cognition, as well as cognitive activity, defined the meaning and content of national education in personality's formation and development.

The Kazakh scientists who have classified the history of national games and their place in the child'seducation, as well as the development of national education and national games of the Kazakh people are A.A. Divayev., B.T. Ainanayev., K.I.Adambekov., B.M.Doskarayev., Zh Bekbatchayev., B. A. Toylybayev., M. Tanikeyev., A. S. Imangaliyev., A. Bupkitbayev., E. Sagindykov., T. Kuanyshov., J. Tulegenov, etc.

Mukhamedzhanov B. K., Demeuov A. K., Imangaliyev A.S., Akanov A., Nurzhanova Zh.Zh., etc. were engaged in the problems of physical education future specialists' professional training.

The works performed by Kaliyev S.K., Uzakbayeva S.A., Kozhakhmetova K. Zh., Moreyev K., Shalginbayeva K., Karakulov K. Zh., Asanov Zh., etc. who proposed the content, principles and methods of national education are of great importance.

A.E. Izmailov., S. Kaliyev., K. Zharykbayev., A. Tabyldiyev., S. Uzakbayeva., K. Kozhakhmetova., Z. Abilova., Zh.Zh. Nauryzbayev., M. Baltabayev., S. Gabbasov., K. Boleyev. studied the national education'stheoretical and folk foundations.

Also, such prominent scientists of Kazakhstan as Abildina S.K., Amirova B.A., Magauova A.S., Atemova K.T., Turgunbaeyva B.A. conducted studies that examined the problems of folk pedagogy formation and development, its means in the upbringing of the younger generation and their use in the educational process.

The scientists and famous psychologists contributing to the study of psychological characteristics of cognitive activity and its foundations are as follows: E.I. Mashbits., S.L. Rubinstein., P. Ya.Galperin., L. S. Vygotskiy., V. V. Davydov., B. G Ananiyev., A. N. Leontiyev., L. Z. Zankov., N.F. Talyzin, etc.

The scientists defined psychological and pedagogical features of cognitive activity and substantiated that it plays a key role in the development of educational activity.

Psychological features of intensifying the personality's cognitionin the educational process in accordance with their age peculiarities were considered by psychologists A. Aldamuratov., K. B. Zharykbayev., M. Mukanov., T. Tazhibayev., A. Temirbekov., Zh. Namazbayeva., G. A. Uruntayeva., M. A. Perlenbetov., S. Bap-Baba, etc.

Theeducators and researchers who have studied the didactic foundations of cognitive activity, ways for increasing educational activity in the educational process,

and problems of cognition formation are as follows: Ya.A. Komensky., N.A. Polovnikova., M.N. Skatkin., B.P. Esipov., M. A. Danilov., P. I. Pidkasistiy., G. I. Shchukina., T. I. Shamova., A. Zh. Karayev., A. E. Abylkasymova., T. S. Sabirov, etc.

The problem of personality'scognitive activity formationis also examined in the dissertation studies of domestic scientists: Kokymbayeva T.I. (Development of primary students' cognitive activity through folk pedagogy), Mustoyapova A.S. (Pedagogical conditions for the formation of senior students' cognitive activity in modern times), Edigenova A.Zh (Formation of primary students' cognitive interest in Kazakh folk tales), Baydrakhmanova D. Kh. (Pedagogical conditions for the formation of students' cognitive activity by using computer technologies in teaching a foreign language), Ibrayeva M.K. (Development of young children's cognitive activity through Kazakh folk art).

Thus, the analysis of the research conducted that the problem of primary students' cognitive activity formation at Physical Education lessons through national physical games has not yet been discussed and studied as a specific scientific challenge.

During the study, we found that the theoretical and methodological foundations have not yet been defined, which could serve as the basis to develop a system of primary students' cognitive activity formation atPhysical Education lessons through national physical games, and major aspects of the problem under study have not been sufficiently identified.All this points to the insufficient level of primary students' cognitive activity formation atPhysical Education lessons through national physical games.

Therefore, there is a need for the research and practice study concerning the problem of development of primary students' cognitive activity at Physical Education lessons through national action-oriented games.

Thus, when analyzing the scientific research and reference and its real development experience, concerning the development of primary students' cognitive activity at Physical Education lessons through national action-oriented games, the following contradictions were revealed:

- a lack ofpedagogical validity and the need to developprimary students' cognitive activity at Physical Education lessons through national action-oriented games in accordance with the modern society requirements;

- a lack of opportunity for using national action-oriented games and their practical application in the development of elementary students' cognitive activity;

- a lack ofneed to use national action-oriented games in the development of elementary students' cognitive activity and effective methods of their implementation, as well as a lack of special education programs;

-contradictions between the need to developprimary students' cognitive activity at Physical Education lessons through national action-oriented games and the fact that the pedagogical conditions based on its results are not fully created.

The above contradictions show a clear need to define the ways of an effective solution in the development of primary students' cognitive activity at Physical

Education lessons through national action-oriented gamesin the theory and practice of pedagogy and require its examination from theoretical and methodological viewpoint.

The urgency of the research and the solution of the above-mentioned contradictions served as the basis for defining the research problem and choosing the topic "The development of primary students' cognitive activity at Physical Education lessons through national action-oriented games".

**Goal of the research**is to give scientific credence and develop the methodology for primary students' cognitive activity at Physical Education lessons through national action-oriented games.

Target of theresearchis theteaching and educational process in elementary school.

**Scope of theresearch**istheteacher'screativeness indevelopingprimary students' cognitive activity at Physical Education lessons through national action-oriented games.

**Hypothesis of the research:** if the constructiveness of elementary students' cognitive activity atPhysical Education lessons through national action-oriented games is given scientific credence, a system of pedagogical conditions, methodological approaches, and components are defined, a content-structure model for the development of national action-oriented games is developed, its effectiveness in practice is tested, then primary students' cognitive activity will be boosted, since national action-oriented gamespromote the development of physical and motor activity of students, increase their motivation and foster the development of language learningdirectly.

#### **Objectives of the research:**

- to define the essence of national games in children'supbringing;

-to specify the concepts "cognition", "activity", "cognitive activity" and the author's definition "action-oriented games" and "national action-oriented games";

- to develop pedagogical conditions for formingprimary students' cognitive activity at Physical Education lessons through national action-oriented games;

- to develop a model for formingprimary students' cognitive activity at Physical Education lessons through national action-oriented games;

- to develop a methodology for formingprimary students' cognitive activity at Physical Education lessons through national action-oriented gamesand its implementation technology;

- to check the effectiveness of methods in the development of primary students' cognitive activity at Physical Education lessons through national action-oriented games during test, as well as the development of research and methodological recommendations.

**Research keynote:**The primary students' cognitive activity formation, the upbringing of national self-awareness in the younger generation, and formation of the child's personality and his or her development into a fully rounded moral personis the basis of the national physical games of the Kazakh people.

The theoretical and methodological foundations of the research are determined by: the theory of knowledge, philosophical principles on the essence of human cognitive activity, scientific and pedagogical works on the research problem, general scientific concepts on the primary education content, competence and its role in a skilledprofessionaltraining, pedagogical, methodological, and technological foundations of primary education. In addition, we have drawn on the following methodological approaches:

- activity approach (L.S.Vygotskiy., P.Ya. Galperin., S.L. Rubinstein., D.B. Elkonin., G.V. Babina., M.A. Cherkasova);

- system approach (K.L. von Bertalanffy., Yu.K. Babanskiy., N.D. Khmel);

- person-oriented approach (Zimnyaya I.A., Bondarevskaya E.V., Shadrikov V.B., Yakimanskaya I.S.);

- axiological approach that defines a person and personality as a high social value (M. S. Kagan., D. S. Likhachev., V. A. Slastenin., E. N. Shiyanov., etc.);

- ethnopedagogical approach (S. Kaliyev., K. Zharykbayev., A. Tabyldiyev., S. Uzakbayeva., K. Kozhakhmetova., S. K. Abildina., K. T. Atemova., Sh. M. Mukhtarova, etc.);

- future teacher training for a healthy lifestyle and students' health promotion (M.V. Kozub., K.I. Shishikina., N.O. Timoshenko., V.B. Ivanova, etc.);

- future teachers and students' training for Physical Education subjects and health-improving activities (I.R.Fedulina., V.V.Korolev., E.V. Zainkina., V.K.Valiyeva., O.V. Yurechko., I.N. Egorov., M.Glukhova., L.V. Kofanova., M.M. Musanov., S.G. Napreyev, etc.);

### The research sources:

- Address to the Nation by the President of Kazakhstan Kassym-JomartTokayev of September 1, 2020: "Kazakhstan in new conditions".

- The Constitution of the Republic of Kazakhstan (adopted by the national referendum on August 30, 1995) (as amended and supplemented on 10.03.2017).

-TheLaw of the Republic of Kazakhstan of July 27, 2007 № 319-III "On Education" (as amended and supplemented on December 21, 2019.)

- Conceptual Framework of Education within the Implementation of the "Rukhani Zhagyru"Program for 2019-2024. - Astana. Approved by Order № 145of the Minister of Education and Science of the Republic of Kazakhstan of April 15, 2019.

- Addressto the Nation by the First President of the Republic of Kazakhstan N. A. Nazarbayev "Kazakhstan–2050 Strategy: a new political course for the State". Astana, 2012

Addressto the Nation by the First President of the Republic of Kazakhstan N.
A. Nazarbayev "Kazakhstan way–2050: common goal, common interests, common future". Astana, 2014.

-Addressto the Nation by the First President of the Republic of Kazakhstan N. A. Nazarbayev "Nurly Zhol-way of the future". Astana.- 2014.-November 11.

- "Plan of the Nation - 100 Concrete Steps" by the First President of the Republic of Kazakhstan N.A. Nazarbayev. Astana, 2015

- "Mangilik El". The Patriot Act. The first President of the Republic of Kazakhstan N.A. Nazarbayev delivered a report of the People's Assembly "Independence. Agreement. Speech at the XXIV session "Nation of united future". - Astana, 2016. - April 26.

- TheArticle by the First President of the Republic of Kazakhstan N.A. Nazarbayev "Future outlook: modernization of public consciousness". http://www.akorda.kz/kz/events/akorda\_news/press\_conferences/memleket-basshysynyn-bolashakkabagdar-ruhani-zhangyru-atty-makalasy query time - January 26, 2020.

- Addressto the Nation by the First President of the Republic of Kazakhstan N. A. Nazarbayev "New development opportunities under the 4<sup>th</sup> Industrial Revolution" of January 31, 2018.

- TheArticle of the First President of the Republic of Kazakhstan Nursultan Nazarbayev "Seven Facets of the Great Steppe" (Astana, November 21, 2018)

- State Compulsory PrimaryEducation Standard. Annex 2 to the Order of the Minister of Education and Science of the Republic of Kazakhstan of October 31, 2018.

- Order of the Minister of Education and Science of the Republic of Kazakhstan of April 03, 2013 №115"On approval of standard curricula for general education subjects, elective and additional courses for general education institutions". As amended and supplemented by the Ministry of Education and Science of the Republic of Kazakhstan №199 of May 10, 2018.

- Order of the Minister of Education and Science of the Republic of Kazakhstan ofNovember8, 2012№500"On approval of standard curricula for primary educationin the Republic of Kazakhstan", as amended by the Ministry of Education and Science of the Republic of Kazakhstan №441 ofSeptember 4, 2018.

- Standard curricula of general education subjects of primary education, approved by Order of the Minister of Education and Science of the Republic of Kazakhstan № 115of April 3, 2013.

In addition, we studied the research by domestic and foreign scientists (philosophers, psychologists, teachers) on the problem related to the development ofprimary students' cognitive activity at Physical Education lessons through national action-oriented games; official documents (laws, concepts, reports, etc.) on continuous pedagogical education; republican, regional andurban bestpractices, the author's experience of research and practice; international practices.

**Research methods:** a set of mutually enriching and complementary methods was used to solve the tasks and test the research hypothesis:

- theoretical, which include: theoretical analysis of philosophical, psychological and pedagogical literature, legislative and regulatory instruments, as well as teaching and learning resources on the research problem; analysis and generalization of educational experience concerning the formation ofprimary students' cognitive activity at Physical Education lessons through national action-oriented games;

- empirical methods: survey, interviewing, observation, conversation, diagnostics, and written questionnaires;

- expert assessment, study of educational documentation, diagnostics of certain components for the development ofprimary students' cognitive activity at Physical Education lessons through national action-oriented games, analysis of the products of the activity of students and future specialists; mathematical and statistical analysis of the results obtained during the study. **Research bases:**Karaganda lyceum school  $\mathbb{N}$  66 and secondary school  $\mathbb{N}$  16. The Pedagogical Department, as well as the Department of Physical Education and Sports of Academician E.A.Buketov Karaganda University were also defined.

**Research basicphase:**The research included several phase.

**Firstphase** (2017-2018) is theoretical and search, where the problem of education system is theoretically analyzed, and an assessment of the current state of training teachers, implementing it, is given. The theoretical area of research has been developed, and the research expectationsweregiven credence. The study's object, subject, purpose and objectives were defined, and the experimental work program was developed.

**Second phase (2018-2019)** is experimental, which resulted in a scientific rationale for developing primary students' cognitive activity at Physical Education lessons through national action-oriented games, and a model of this process has been developed. The methods for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented gameshave been developed. The technology for its implementation has been developed and its effectiveness experimentally tested.

Third phase (2019-2020) is the summarization, where the analysis and the research results were carried out and the obtained scientific results were elaborated. The workon correcting results, as well as detailing the theoretical and experimental databas been done. In addition, the conclusions and recommendations were given.

### The scientific novelty and theoretical relevance of the research:

- the essence of national games in children's educationhas been defined;

- such concepts as "cognition", "activity", "cognitive activity" have been specified and the author's definition of "action-oriented games" and "national action-oriented games" concepts have been given;

- pedagogical conditions for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented gameshave been created;

- the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented gameshas been modelled, and the components, criteria, and indicators of the formation process have been determined;

- the methods for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented gameshave been developed. The technology for its implementation has been developed and its effectiveness experimentally tested.

The scientific and methodological recommendations have been developed.

**Practical implications:**theelectivecoursesyllabus "Nationalactionorientedgames" ontheformation of primary students' cognitive activity at Physical Education lessons through national action-oriented gameshasbeendeveloped. Such an e-learning tool for teachers as "The formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games" has been developed.The study results can be used both by primary and Physical Educationteachers of general education schools in the educational process and in heightening students' interest, and used as the basic methodological guide for teachers.

The validity of the research results are provided by theoretical, methodological and practical rationale; comparing the research content with the scientific apparatus; a complex of applied methods in accordance with the subject and objectives of the research; statistical analysis of empirical material, the introduction ofdevelopedmethods into the practice of primary schools and higher educational institutions.

# Principal pointsfor a doctoral thesis'defence:

- specified content of such concepts as "cognition", "cognitive activity" and the author's definition of "action-oriented games" and "national action-oriented games" concepts.

- pedagogical conditions for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games.

- model of the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games have been created

- methods for formingprimary students' cognitive activity at Physical Education lessons through national action-oriented games.

- results of methods' test in the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games.

**Mainresultsandresearch provisions**are presented at international scientific and practical conferences (Karaganda 2017; Kostanay 2017; Czech Republic 2018) and in publications recommended by the Committee for Control of Education and Science (Astana 2018; Ufa 2019; Almaty 2019) and in Scopus database (Space and Culture, India, 2020 (march). - V. 7 (4). - P. 255-263.

http://www.spaceandculture.in/index.php/spaceandculture/issue/view/33.

The total number of study publications is 17.

The research results are implemented in the pedagogical process of educational institutions and are reflected in the research base.

**Theresearch content:** the thesis consists of an introduction, two sections, a conclusion, reference and appendixes.

**The introduction** rationalizesthe relevance of the research and defines the scientific apparatus, object, subject. Theresearch goals, objectives and hypothesis are formulated. The scientific novelty, practical significance, theresearch phase, and principal points for a doctoral thesis' defence have been defined.

Thefirstsection "Scientific-theoretical foundations of formation ofprimary students' cognitive activity at Physical Education lessons through national action-oriented games" definesscientific-theoretical foundations of formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games, reveals the essence of using national games in the educational process, determines pedagogical conditions for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games, develops the model of the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games. Thesecondsection "Thecontentofthe formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games" presents an argument for the socio-economic aspects of training future Physical Education specialists on national sports for primary school, the pedagogical need isidentified, the content of primary specialists activities on Physical Education related to national sports is specified, the methods for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games and its implementation are developed, the methodology for the formation of primary students' cognitive activity at Physical Education lessons through national action-oriented games is experimentally substantiated, and the analysis of their results is carried out.

**The conclusion** drawsfindings based on the obtained results of the study, as well as diagnostic materials used within the experimental work.

The appendix demonstrates the research materials that are not included in the thesis' content.