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**CONCRET CONDITIONS FOR DEVELOPING STUDENTS' INTELLIGENCE
WITHIN A PEDAGOGICAL FRAMES AND RESEARCH CULTURE**

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The given article presents different approaches to the notion of "research culture", characterizes this phenomenon in terms of pedagogical science, the authors pay special attention to the description of functions, as well as the study of the components of this phenomenon. The article analyses the complex research skills as a basis for the research culture of a future teacher in a multifaceted way. Particular attention is paid to the intellectual component of research culture. The authors introduce the concept of intellectual and creative research environment of higher education as a system conducive to the formation and development of intellectual potential of the educational process participants. The signs of environment: motivation for research activity, saturation of environment, organization of conditions of intellectual activity, positive psychological climate, value support for the development of intellectual potential. The author has performed empirical research, which aims to identify and describe in detail the pedagogical conditions of students' intellectual development in the framework of research culture.

Key words: research culture, research culture functions, research skills, intelligence, pedagogical conditions, students' intelligence development.

**КОНКРЕТНЫЕ УСЛОВИЯ ДЛЯ РАЗВИТИЯ ИНТЕЛЛЕКТА СТУДЕНТОВ
В РАМКАХ ПЕДАГОГИЧЕСКИХ УСЛОВИЙ И ИССЛЕДОВАТЕЛЬСКОЙ КУЛЬТУРЫ**

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В данной статье представлены различные подходы к понятию "исследовательская культура", дана характеристика данного явления с точки зрения педагогической науки, особое внимание авторы уделяют описанию функций, а также изучению компонентов данного явления. В статье многогранно анализируется комплекс исследовательских умений как основа исследовательской культуры будущего учителя. Особое внимание уделяется интеллектуальному компоненту исследовательской культуры. Авторы вводят понятие интеллектуально-творческой исследовательской среды вуза как системы, способствующей формированию и развитию интеллектуального потенциала участников образовательного процесса. Признаки среды: мотивация к исследовательской деятельности, насыщенность среды, организация условий интеллектуальной деятельности, позитивный психологический климат, ценностная поддержка развития интеллектуального потенциала. Автором проведено эмпирическое исследование, целью которого является выявление и подробное описание педагогических условий интеллектуального развития студентов в рамках исследовательской культуры.

Ключевые слова: исследовательская культура, функции исследовательской культуры, исследовательские умения, интеллект, педагогические условия, развитие интеллекта студентов.

**ПЕДАГОГИКАЛЫҚ ШАРТТАР МЕН ЗЕРТТЕУШІЛІК МӘДЕНИЕТ ШЕҢБЕРІНДЕ
СТУДЕНТТЕРДІҢ ИНТЕЛЛЕКТИСІН ДАМУДЫҢ НАҚТЫ ШАРТТАРЫ**

Абдыкадырова А.З. – педагогика ғылымдарының магистрі., Т. Қ. Жүргенов атындағы ҚазҰӨА, "Қазақстан тарихы және әлеуметтік ғылымдар" кафедрасының аға оқытушысы.

Аталмыш мақалада «зерттеу мәдениеті» ұғымына әр түрлі көзқарастар ұсынылған. Педагогикалық ғылым саласы тұрғысынан бұл құбылысқа сипаттама берілді. Автор аталмыш құбылыстың функциялына сипаттама жасап, сонымен қатар оның компоненттерін зерттеуге ерекше назар аударды. Мақалада болашақ мұғалімнің зерттеу мәдениетінің негізі ретінде зерттеушілік дағдылар кешені жан-жақты талданған. Зерттеу мәдениетінің интеллектуалды компонентіне ерекше назар аударылады. Автор оқу үдерісіне қатысушылардың интеллектуалды потенциалын қалыптастыруға және дамытуға ықпал ететін жүйе ретінде университеттің интеллектуалды және шығармашылық зерттеу ортасы тұжырымдамасын енгізеді. Қоршаған ортаның белгілері: зерттеу іс-әрекетінің мотивациясы, қоршаған ортаның қанықтылығы, интеллектуалды белсенділік үшін жағдайларды ұйымдастыру, жағымды психологиялық климат, интеллектуалды потен-

циалды дамытуға құндылықты қолдау. Автор эмпирикалық зерттеу жүргізді, оның мақсаты – зерттеу мәдениеті аясында оқушылардың интеллектуалды дамуының педагогикалық жағдайларын егжей – тегжейлі анықтау және сипаттау.

Түйінді сөздер: зерттеу мәдениеті, зерттеу мәдениетінің функциялары, зерттеу дағдылары, интеллект, педагогикалық жағдайлар, оқушылардың интеллектісінің дамуы.

Introduction. In the modern higher education system, addressing the cultural development of the individual is becoming a leading trend in the higher education process. In our research we have highlighted research culture among the wide variety of cultures because it has a special place in the process of individual's knowledge of the surrounding reality. Unfortunately, the educational technologies currently used in pedagogical universities are not always sufficiently aimed at stimulating intellectual and research activity of future teachers. In this regard, it is important to pay special attention to the development of future teachers in the framework of research culture by encouraging them to research activities.

A future teacher becomes a researcher on the condition of continuous study of scientific achievements in the field of their professional responsibility, implementing them in their practical activities; innovation orientation; analysis of his/her research experience and application of diagnostic methods to the subjects of the educational process; justification of the effectiveness of the author's educational methods through reliable data. These skills are usually acquired after at least 5-10 years of professional experience, during which a teacher develops into a research worker. However, even within the walls of the university future teachers can learn the skills of research work.

Modern researchers interpret the concept of "research culture" (RC) in different ways. Sh.T. Taubaeva and S.T. Imanbaeva highlight the concept of "research competence of a professional", which they regard as a part of his innovative consciousness, behaviour, activity, which ensure the competitiveness of the country and its citizens [1]. According to V.V. Balashov defines RC as a complex psychological formation that characterizes an individual's ability to solve problems using methods of scientific cognition [2, p.36]. According to V.V. Kraevskii, RC is a totality of methods of comprehension of the surrounding reality, which are mastered by a person at a particular stage of scientific development [3, p.6]. V.S. Lazarev understands by KSA (knowledge, skills and attitudes) a certain personal quality characterized by common understanding of the unified picture of the world, mastering the methodology of scientific cognition, the presence of value orientations regarding the results achieved, which simultaneously provides creative self-development of a person [4, p.28].

The analysis of different interpretations of RC has allowed E.N. Kuklina has summarized different definitions of this term, in accordance with which she considers RC as

- a way or a result of creative self-realization of a person in the process of his (her) professional activity;
- a property of a person, based on a certain level of proficiency in methods and ways of implementing professional activity;
- abilities, which are implemented in the implementation of creative activity and characterize the specifics of professional thinking [5, p.83].

Main part. Based on various psychological and pedagogical definitions of KSA (knowledge, skills and attitudes), the following definition of a professional's KSA can be proposed: KSA is a personal property characterized by orientation on the value of research activity, constant need for research activity, the presence of a set of methodological, attitudinal and subject-specific research knowledge and skills, and a high level of research abilities.

Thus, RC is characterized, first of all, by the presence of students' active need to search, a set of certain knowledge and research abilities, the development of which will allow to successfully carry out research activities.

According to O.N. Krutikova, RC is based on research activity and research behavior, but, unlike them, it is a conscious, purposeful, culturally constructed activity. The development of RC depends largely on the richness and variability of human realities, as well as on the extent to which socio-cultural norms lay the value of human research activity in interaction with these realities. The development of a research attitude is important in the implementation of research activities. The research attitude is a meaningful personal foundation from which an individual does not simply react actively to changes in the world, but is able to seek and find previously unknown things [6, p.11].

According to S.L. Belykh, there are two forms of RC – social and personal. The essence of the latter is that it is a modification of the universal RC, which, in turn, is a part of the integral culture of society, at the same time being a component of a specific professional culture. In this regard, according to the researcher, the public form of IR is a set of norms of research activities of the whole society, the personal form of IR is the norms of research activities of an individual specialist within the framework of his/her professional activities. The learning of social RC by a person leads to the formation of its personal form [7, p.23].

Thus, RC of a future teacher is a component of general IK, a set of standards and methods of cognition, ways of professional implementation of research activity, an integral formation formed and developing in the course of implementation of professional pedagogical activity.

According to the researchers, the functions of the RC of a future teacher are as follows:

- Gnostic, providing a common understanding of the methods of knowledge and study of the surrounding reality,
- Informative, transmitting the social experience of cognition of the surrounding reality;
- Communicative, allowing research contact with concrete people;
- Humanistic, which allows the development of a creative personality;
- Regulatory, acting as a system of normative requirements for research subjects [8, p.1].

According to A.V. Moskvina, being one of the components of the unified culture of an individual, RC has the following components:

- firstly, research world outlook, which is a component of scientific world outlook, is a unified system of views on the surrounding reality;
- secondly, research thinking, which is the ability of human thinking to do research that leads to creation of new knowledge;
- thirdly, research ethics, which is a set of norms of ethics and partnership relations in the research environment [9, p.112]. Research skills and abilities (hereinafter – RQI) can be considered as the foundation of future teacher's knowledge structure, which are purposeful actions based on a set of previously acquired knowledge in the course of educational and cognitive activities and corresponding to the goals and objectives of research activities.

In classifying KSA (knowledge, skills, abilities), researchers have identified the following components in their structure [10, p.47]:

- intellectual (designed both for perception of received information and social experience and for their adequate transformation by means of thinking operations)
- practical (designed for the application of theoretical provisions of subject disciplines according to the objectives of the research process, including the ability to acquire new data from different sources, to process and design the data using different methods)
- self-organization and self-monitoring (designed to effectively organize the research activity, determine its methods, tools, procedures and timing, as well as assess its quality and results).

Considering to the structural model of professional RC, researchers have identified the following components:

- Intellectual (cognitive), which is a set of interrelated knowledge: methodological, which provides the general orientation of research, in the unity of principles, methods and techniques; attitudinal, orienting the individual to a certain attitude to the reality in general and, in particular, to the object of research; reflective, contributing to determining the limits of their own capabilities in the implementation of research;
- Operational, providing for the presence of certain research skills of the individual, such as problem recognition, hypothesis formulation, definition of concepts, classification skills, observation, conducting experiments, formulation of conclusions, structuring of research material;
- Creative, indicating creativity, the ability to project as many ideas as possible, the ability to move easily from one phenomenon to another, often quite distant in nature, and the presence of original thinking;
- Motivation and value, including the values of research, such as the value of a true result and its achievement, the value of action research, the value of communication processes designed to link the positions of different research subjects in the overall research process, the value of productive research embodied in a concrete result, with completeness and relevance [11, p.19];

And finally, the personal component, representing such qualities of the personality of the researcher, as sensitivity to the researched problems; ability to constantly strive for the essence of the research problem; significant level, flexibility and productivity of thinking; ability to reproduce original ideas, to establish connections between research objects; ability to forecast; developed intuition; orientation to self-actualization and disclosure of own potential. Analyzing the intellectual component of the future teacher's IQ, it is necessary to say that according to M.A. Kholodna, the author of the fundamental study of the psychology of intellect [12, p.71]. There is no unified approach in defining the notion of "intellect" which is defined by researchers as a general ability of an individual to consciously adjust his thinking in accordance with arising requirements, a certain mental adaptation to new conditions of life activity (V. Stern); as a combined and universal ability of individuals to adequate action, logic thinking and results.

According to Sh.T. Taubaeva, K.J. Kozhakhmetova, A.K. Mynbaeva, "intellect – a system of social, humanistic-oriented cognitive, thinking and creative abilities of man, which provide a variety of forms and methods of his activities in the prevailing rules of high morality and morality" [13, p.39]. The production of knowledge is carried out with the help of intellect.

Thus, we can assume that intelligence is the ability of a person to carry out cognitive processes and effective problem solving, including the setting of previously unknown tasks. As previously noted, the intellec-

tual component of RC is a set of interrelated knowledge, which, in turn, can be considered as a result of thinking and practical human activity, which is expressed by a system of empirical facts, theoretical concepts, scientific laws and theories. The purpose of knowledge is to organize the cognitive process and interpret the processes and events encountered in the surrounding reality. When analyzing the intellectual component of RC, it is necessary to define both the types of knowledge acquired by a future teacher in the formation of RC and the cognitive methods used for this purpose. At the same time, the amount of knowledge acquired by a person tends to constantly increase, which is in direct dependence on the activity in which the person is engaged. Human intelligence is also subject to change over time. It is influenced by both internal (e.g. good memory, engaging in creative activities) and external factors [13, p.41].

The level of formation of RC is directly related to the intellectual level of a future teacher, therefore it seems necessary to take into account the above mentioned factors when stimulating the cognitive process.

According to M.F. Shklyar, the following basic forms of cognition can be distinguished: empirical and theoretical. These forms of cognition do not oppose, but, on the contrary, complement each other, as their areas of application often overlap [14, p.6].

In this case, the empirical form of cognition is the primary, initially inherent in any practical human activity. Historically, this form of cognition has provided man with all the necessary body of knowledge in different areas of his life, up to the emergence of special ways of cognition. The specificity of the empirical form of cognition consists in the absence of systematic and purposeful orientation, as well as the unconscious use of empirical methods of research. In the case of empirical cognition, the latter is partly intuitive, partly based on primary knowledge about the subject. Therefore, the intellectual component of IR should include intuitive knowledge about the application of empirical research methods and primary knowledge in the field of research.

The use of empirical methods is a necessary, but not sufficient condition for the formation of future teachers' IR. The application of theoretical form of cognition, which is based on theoretical thinking that uses sense-concrete perception of reality, but goes beyond it, is required to introduce future teachers to research activities. It is through the use of theoretical thinking that new concepts and models, hypotheses and theories emerge.

The theoretical form of cognition necessitates future teachers' knowledge of specific research terminology, categories such as relevance, object, subject, purpose, objectives, hypothesis, research methods, etc.

However, the variety of research methods within RC can be divided into – Philosophical, which sets out a common research strategy;

- General scientific methods (analysis, synthesis, generalization, abstraction, analogy, idealization, modelling, etc.), which are used in any scientific research and are an intermediate step in the transition from philosophical to special scientific methods; and finally,

- Particular scientific methods (analysis of the literature, analysis of results of vital activity, analysis of experience on the problem of the research, observation, interview, conversation, experiment, etc.), which are a set of methods, techniques and principles of research in a particular scientific field.

- Among them one can distinguish between disciplinary methods, which are used exclusively within a particular subject- scientific field, and interdisciplinary methods, which are used in complex research. For future educators, knowledge of the various methods that can be used to transform the information acquired in the research process is essential. It should be noted that the processing of data obtained in research can be carried out both without the use of technical means, and with the use of the latter. The result of data processing is a final volume of final information, which is of no value if handled inappropriately. Therefore, the future teachers should know how to systematize the results of the research.

In addition to knowledge that may be more theoretically oriented, knowledge that is more applicable in the practical area of RC should be noted, such as knowledge of the requirements for the visual presentation of research results, which should be designed in accordance with developed standards that define the structure and norms of research design.

Thus, the formation of ICT (Information and communications technology) requires future teachers to have the following theoretical knowledge: special terms and concepts; methods of obtaining information, data processing, systematization and analysis of research results; requirements for visual presentation of research results.

Due to the fact that the topic of our study is the analysis and definition of pedagogical conditions of students' intelligence development in the framework of ICT, let us first elaborate on this definition. It should be noted that there is no unified approach in defining the concept of "pedagogical condition", which is considered by researchers as:

- a circumstance or situation that facilitates or hinders the development of the educational process;
- a set of objective capabilities, factors and activities of the educational process, which is a result of purposeful choice, creation and application of components of the content, methods and organizational forms of the educational process aimed at achieving specific goals;
- a circumstance which predetermines a particular development of the educational process;

- a set of forms, methods, and pedagogical techniques for developing specific professional and personal qualities of future teachers [15, p.190].

We will consider the pedagogical conditions of students' intellect development within the framework of IR as a complex of potential opportunities of intellectual and creative research environment of higher education institution, aimed at the development of RC and intellectual level of future teachers. The intellectual and creative research environment of a university is presented as a system, the components, characteristics, and structure of which contribute to the formation and development of intellectual potential of participants in the educational process and, as a consequence, to the formation and development of RC of future teachers.

Such intellectual and creative research environment is characterized by the following specific features:

Firstly, it should provide motivation for research activity through the formation of intrapersonal motives for self-knowledge and personality development of a future teacher in the process of multifaceted educational activity. This can be achieved through the formation of a positive attitude towards the acquisition of knowledge obtained in higher education institution, applicable in the implementation of pedagogical activity. The mentioned feature of intellectual-creative research environment is designed, on the one hand, to guide a future teacher to implement self-development, on the other hand, to assimilate the integral content of pedagogical work. Secondly, intellectual provision of educational activity through saturation of the intellectual and creative research environment with a set of creative problem tasks with sufficient content of an intellectual component. Thirdly, organization of intellectual activity environment. This feature of the intellectual and creative research environment should take into account the internal conditions of cognitive processes, regularities of intellectual and creative development of subjects of the educational process, psychological age features of future teachers, individual potential of each student. Fourthly, emotional and volitional support of educational activity by creating a positive psychological microclimate. Fifthly, personal provision of educational activity by means of valuable assistance to the development of intellectual potential of students and their orientation in the future to a fundamentally new level of professionalism.

In our opinion, when organizing the educational process, it is necessary not only to take into account the psychological and pedagogical regularities of interconnectedness of the components of students' intellectual potential, but also to create conditions under which the intellect of future teachers will be developed. In accordance with the conception of the research, we investigated a set of pedagogical conditions promoting the development of future teachers' intellect in the course of the educational process. We also tested the effectiveness of the created pedagogical conditions that promote the development of future teachers' intellect in within the framework of the RC, which were:

- I. creation of intellectual and creative research environment;
- II. psychological and pedagogical support for research activity;
- III. motivating research activity;
- IV. activation of students' multifaceted educational activity.

Creation of an intellectual and creative research environment provides for the implementation of problem and uncertainty situations in the educational process, procedural nature of the intellectual and creative research environment, positive psychological microclimate of research activities, introduction of an intellectual and creative component with intellectual content.

The ascertaining stage of the experiment included a study of the intellectual development of the future teachers in such aspects as

- 1) diagnostics of the level of students' "general intellect" development (CAT test);
- 2) diagnostics of the structure of intellect (R. Amthauer test).

The KSA test belongs to the category of "general intellect" tests, is designed for diagnosing the integral index of "general abilities" and provides for diagnosing such "critical points" of intellect as the ability to generalize and analyze material; flexibility, inertness and switchability of thinking; emotional components of thinking and distractibility; speed and accuracy of perception, distribution and concentration of attention; use of language and general literacy; spatial imagination. The R. Amthauer test includes diagnostics of logical, linguistic, and spatial types of intellect.

In the process of further work a set of pedagogical conditions, contributing to the development of students' intellect within the framework of RC has been implemented.

In the formative experiment, an attempt was made to create an intellectually creative research environment by providing it with problems and uncertainties through the introduction of problematic tasks into the teaching material. The main characteristic of the latter was the contradictory circumstances that had to be analyzed in order to choose the right way to solve the problem. The process of the intellectual and creative research environment was ensured by redirecting the research activity towards the process itself and not towards the end result. A positive microclimate of research activity was ensured by creating a psychologically comfortable environment, an emotionally positive background, as well as humane and democratic relationships characterized by mutual respect, mutual help and understanding. These conditions have led to the emergence of situations of success, the realization of value for the potential of students, the encouragement of inquisitive search, active work, the development of initiative and independence in the

development of ideas and ideas.

In the course of the forming experiment the intellectual and creative component of the activity was provided by saturation of the intellectual and creative research environment with creative tasks with intellectual content. The formation of intellectual and creative component of activity consisted in the use of creative and reproductive tasks, application of logical and heuristic methods when solving them, intellectualization of tasks, presence of creative elements in the educational activity of students in general. In this connection it was necessary to combine different forms of learning activities: frontal, group, individual. At the same time, the system of individual creative tasks included different tasks according to the level of complexity.

At the same time favorable creative atmosphere was provided by means of joint creativity of students and consisted in limiting template thinking, stimulation of creative initiative, non-standard and original approach while identifying new problems and finding ways to solve them. These approaches to creating a favorable creative atmosphere were achieved by giving tasks in such a way that they would stimulate non-standard thinking, analyze typical research objects from a previously unfamiliar perspective, look for unusual interrelations between different entities, etc.

The mutual communication between the participants of the research activities led to the creation of a collaborative atmosphere, activated the students to generate ideas, to interchange judgements and experiences.

During the formative experiment, in order to strengthen the focus on future professional activity in practical classes, various pedagogical situations were simulated, which led to the creation of conditions for the practical application of the acquired knowledge. The students were given the task of developing an extensive outline of training sessions, public events, didactic materials, methods of diagnostics of the intellectual potential of pupils.

Also, future teachers prepared reports and speeches devoted to insufficiently researched pedagogical problems, master classes were held in student groups, students participated in exhibitions of research papers, scientific and practical conferences, competitions, Olympiads, etc. The implementation of this pedagogical condition proved to be effective in combination with the development of future teachers' motivation-value attitude to pedagogical innovations and innovations.

Activation of multidimensional educational activity of students was provided by means of logistical and scientific-methodical support.

In the course of the forming experiment, this condition was implemented through the use of the following educational methods: active (heuristic, problem-based, search and research), interactive ("brainstorming", "decision tree", "common circle", etc.), projective, activation of intellectual and creative activity at professionally oriented classes. A set of developed and applied in practice pedagogical conditions for students' intellectual development within RC was based on the principles of different pedagogical approaches. The use of traditional approach implied the acquisition of knowledge, necessary in the future pedagogical activity. Personality-oriented approach provided the focus of the educational process on determining the individual characteristics of students, the development of personality of future teachers. The activity-based approach was based on the recognition of constructive learning and cognitive activity as the basis, means and prerequisite for students' personal development. The application of the activity-based approach meant comprehension, perception, affirmation and use of the acquired knowledge by students in practice. The problem-based approach was implemented through the use of problem-based tasks and professionally-oriented situations in the educational process. The developmental approach was ensured through qualitative and quantitative changes in the intellectual parameters of the students, which were implemented through the use of various methods of activation of intellectual and research activity of students in the educational process.

Control testing using the same diagnostic methods (R. Amthauer test), as well as observation of students' activities allowed to diagnose significant changes in the intellectual development of students who took part in the experimental study.

During statistical processing of the results of diagnostics of intellectual development of the subjects there were significant differences in the level of development of "general intellect" and in the components of the structure of intellect in the direction of increasing all the diagnosed indicators of intellect.

Observation of students' activity allowed to note the facts of increased activity of students in the process of educational activity and reduction of time for searching solutions for the buildings presented to them.

Conclusion: In conclusion, it should be noted that KSA of students is an integral part of general professional pedagogical culture. The formation of KSA should be based on the future teachers' performance of research work. The process of development of students' intellect within the framework of KSA will make it possible to determine the most effective ways of solving current contradictions between the changes occurring in society and the level of future teachers' readiness for professional activity; between the steady increase in the volume of information and the capabilities of its assimilation; between the state order for teachers with formed KSA and insufficient elaboration of this problem in the theory and practice of pedagogy.

The results of the experimental study indicate the feasibility of using the pedagogical conditions of stu-

dents' intellect development as part of KSA in the learning process, as well as the fact that the effective implementation of these pedagogical conditions is possible when they are applied in the classroom.

This study can be the basis for further developments in the field of didactic provision of students' intelligence development; application of information and communication technologies and the Internet in the development of intellectual level of future teachers within ICT; as well as research on intellectual development of graduates of pedagogical universities at the postgraduate stage.

REFERENCES:

1. **Taubaeva Sh.T., Imanbaeva S.T. Issledovatel'skaya kompetentnost' specialista v oblasti obrazovaniya** // Elektronnyi nauchnyi zhurnal "CITISE". 13.00.00 Pedagogicheskie nauki. 2016. http://ma123.ru/load/citiseh_1_5_2016g/13_00_00_pedagogicheskie_nauki/taubaeva_sh_t_imanbaeva_s_t_issledovatel'skaya_kompetentnost_specialista_v_oblasti_obrazovani-ja/36-1-0-186.
2. **Balashov V.V. Organizaciya nauchno-issledovatel'skoi deyatel'nosti studentov v vuzah Rossii** [Text]: monografiya/ v 3-h ch. Ch. 1/V.V. Balashov V.V. – M.: Gosudarstvennyi institut upravleniya, 2002. – 60 p.
3. **Kraevskii V.V. Metodologiya pedagogiki** [Text]: uchebnoe posobie dlya pedagogov-issledovatelei / – Cheboksary: Izd-vo ChGU, 2009. – 95 p.
4. **Lazarev V.S., Stavrinova N.N. Podgotovka budushih pedagogov k issledovatel'skoi deyatel'nosti** [Text]: uchebnoe posobie – Surgut: SurGPU, 2007. – 178 p.
5. **Kuklina E.N. Formirovanie opyta issledovatel'skoi deyatel'nosti u studentov pedagogicheskogo vuza** [Text]: monografiya/– Sochi: RIO SGUT i KD, 2008. – 100 p.
6. **Krutikova O.N. Roles of research culture in the universities educational process** [Text]: /Vestnik Nauchnye issledovaniya v obrazovanii.– 2010. – № 9. – 45 p.
7. **Belyh S.L. Upravlenie issledovatel'skoi aktivnost'yu studenta** [Text]: uchebnoe posobie –Izhevsk: Udmurtskii gosudarstvennyi universitet, 2008. – 279 p.
8. **Mareev V.I. Issledovatel'skaya deyatel'nost' v pedagogicheskom vuze: teoriya i praktika** [Text]: uchebnoe posobie/ Rostov-na-Donu, 2006. – 160 p.
9. **Moskvina A.V. Stanovlenie nauchnogo tvorchestva studentov kak pedagogicheskaya problema** [Text]: /Vestnik OGU. –2011.– № 3. – 112 p.
10. **Milash O.A. Professional'naya podgotovka budushih uchitelei: neobhodimost' formirovaniya issledovatel'skoi kul'tury studentov** [Text]: Jurnal / Mir nauki, kul'tury, obrazovaniya. – 2013. – №5. – 47 p.
11. **Petrova N.V. Psihologo-pedagogicheskaya sushnost' issledovatel'skoi kul'tury lichnosti** [Text]:/ Vestnik Adygeiskogo gosudarst- vennogo universiteta. Seriya 3: Pedagogika i psihologiya. – 2007. – №3. – 148 p.
12. **Holodnaya M.A. Psihologiya intellekta: paradoksy issledovaniya** [Text]: uchebnoe posobie/ SPb.: Izd. «Piter», 2002. – 345 p.
13. **Taubaeva Sh.T., Kozhahmetova K.Zh., Mynbaeva A.K. Konceptual'nye podhody k opredeleniyu sushnosti ponyatii intellektual'nogo potentsiala i kapitala lichnosti** [Text]: jurnal / Vestnik KazNU. Seriya «Pedagogicheskie nauki». – 2013. – №2 (39) – 73 p.
14. **Shklyar M.F. Osnovy nauchnyh issledovani i** [Text]: uchebnoe posobie/– M.: ITK «Dashkov i K», 2009. – 295 p.
15. **Pedagogical dictionary /gl. red. B.M. Bim-Bad** [Text]: – M.: Bol'shaya Rossiiskaya Enciklopediya/ 2005. – 468 p.

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