Research culture of future teachers: historical and pedagogical aspect

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Abstract: *The article examines the theoretical and historical aspects of forming research culture and cultural-research competence among students in pedagogical fields. It discusses the development stages of the research culture concept, its structural components, and its role in the professional activity of teachers, highlighting its importance for developing students' research skills.*
Keywords: *research culture, pedagogical activity, research skills, historical-pedagogical development*

INTRODUCTION

The practice of forming students' research competencies in pedagogical areas is often carried out based on the theoretical foundations of the concept of research culture. Therefore, in addition to diagnosing research culture skills in future teachers, it is important to have a general historical and theoretical picture of the formation and development of this pedagogical phenomenon.

Literature review on the topic

In modern scientific sources, the historical roots of the research culture of future teachers and the process of its formation and development have not been sufficiently studied. In particular, it is observed that published works on this topic are often limited to a general description of the state of research culture in educational organizations (J.A.Zulkarnaeva, M.X.Ivanova et al. [1; 2]). At the same time, some scientific works present the results of direct diagnostics of the research culture of students in pedagogical areas [3; 4].

The concept of "culture" has a long and complex history, with its roots dating back to Ancient Greece and Ancient Rome. The term, derived from the Latin word "cultura", originally meant "to cultivate" or "to use the land" and was used in agronomy and agricultural activities. As philosophy and the social sciences developed, the concept of culture began to take on a broader meaning, relating to human activity, art, religion, customs, values, and social institutions. During the Middle Ages and the Renaissance, the concept of culture became closely associated with education and intellectual development.

Culture has been studied by many philosophers throughout history. For example, for Aristotle, culture is an essential component of human existence, which he linked to the concept of "entelechia" (the realization of inner potential). Aristotle saw culture as a form of activity that helps people realize their potential and achieve higher heights. His works discuss the connection between virtue and cultural practice. The philosopher believes that culture shapes human character and connects it with the ability to act in accordance with virtue. Aristotle also saw culture not as a static concept, but as a process that changes over time, depending on historical, geographical and social conditions [3].

According to I.V.Moskvin [2], the first research culture was formed in educational institutions in the countries of the ancient world (the Pythagorean School, Plato's Academy, Aristotle's Lyceum). During this period (5th-6th centuries), students showed great interest in self-improvement through the study of cultural values and traditions.

In the 7th-10th centuries, the research culture of those studying in educational centers began to adopt new development trends, as research laboratories appeared on the basis of schools and lyceums and favorable conditions were created for studying the cultures and traditions of different countries.

In the 11th-16th centuries, schools and lyceums from different countries united, and cooperative cultural and research activities developed among students of scientific schools.

In the 17th-19th centuries, the value of cultural and scientific knowledge increased, scientific academies were established, and the principle of free cultural and scientific research based on new research methods was put forward. During this period, research culture was viewed not only as a phenomenon of scientific knowledge related to the study of cultural traditions, but also as an ability, skill, and competence demonstrated by the student.

In the development of students' research culture in pedagogical areas in the 21st century, its components (informational-cultural, communicative-cultural, etc.) are distinguished. Thus, research culture has a complex structure and includes various aspects of the cultural activity of future teachers. In the modern understanding, research culture includes three important components: research activity, research competence, and research competence.

Research activity is considered in scientific pedagogical literature as a systematic work aimed at studying, analyzing and improving educational processes and phenomena (I.A.Zimnyaya, Yu.K.Babansky et al. [4;16]).

V.I.Zagvyazinsky understands research competence as the ability of teachers and students to effectively implement research activities in the educational process. It includes the necessary knowledge, skills and qualifications to define research tasks, develop a methodology, collect and analyze data, and interpret and apply the results in practice [3,39].

E.V.Berezhnova defines research competence as a person's ability and willingness to demonstrate their knowledge, skills, and experience in conducting research and achieving set goals and objectives [1,28].

In the process of developing pedagogical thought, the issue of cultural-research competencies was first studied; for example, it was noted in the works of V.V.Kraevsky [1,60].

Research culture is an important part of the professional culture of a teacher, reflecting not only scientific work skills, but also a general approach to the educational process, the desire for self-improvement, critical thinking and the ability to analyze the results of pedagogical activities. Teachers should strive to constantly update their knowledge and skills.

Analysis and results

A culture of inquiry encourages educators to explore new methodologies, technologies, and approaches to education. Educators with a culture of inquiry are able to critically evaluate existing methods and technologies and make necessary changes. It also inspires them to develop new methods, which in turn improves the quality of education and develops the creative potential of educators and students.

Teachers' participation in scientific research, participation in conferences, and publication of scientific articles not only enriches their personal experience, but also contributes to the development of the entire educational environment. A research culture allows teachers to cooperate with other educational institutions, scientific organizations, and businesses, which creates an opportunity to exchange experiences and introduce modern technologies. Teachers who are actively involved in research activities often gain prestige among their colleagues and students, which increases their professional status and strengthens confidence in their competence [1,18].

Therefore, a culture of research is an integral part of a teacher's professional culture and serves to create an effective and dynamic learning environment.

It should be noted that it is important to distinguish between research culture and methodological culture. Research culture is the ability to conduct research, analyze the educational process and use scientific approaches, while methodological culture includes the knowledge, skills and qualifications necessary for a teacher to develop and apply pedagogical methods and technologies in educational practice. While research culture is aimed at searching for new knowledge and analyzing the educational process, methodological culture is aimed at applying existing methods and technologies in practice.

The study of the historical and pedagogical aspects of the research culture of future educators allows us to draw the following conclusions:

Culture is the creative result of human activity, consisting of material (monuments, works of art, etc.) and intangible (morality, views, religion, etc.) components, manifested in the formation and development of art objects, spiritual values, traditions, and other aspects of human creative activity.

The historical and pedagogical aspects of the research culture of future educators are demonstrated at the following stages:

First stage (5th-6th centuries) - students expressed interest in self-improvement through the study of cultural values;

Second stage (7th-10th centuries) - research laboratories have emerged on the basis of schools and lyceums to study the cultures of different countries;

Third stage (11th-16th centuries) - cultural and research activities have developed among students of various scientific schools;

The fourth stage (17th-19th centuries)**)** - research culture has become a cultural-research competency;

Fifth stage (20th century) - cultural and research competencies have become a mandatory requirement for students in pedagogical fields;

Sixth, modern stage (21st century) - students' cultural and research competencies are divided into sub-competencies.

The research culture of future teachers is their ability to demonstrate their skills, cultural knowledge and experience, values and traditional principles, motives, beliefs and views for conducting research; the ability to organize and carry out research activities in connection with internal personal beliefs, moral and ethical principles, as well as societal norms; and the ability to diagnose the cultural values of students and draw appropriate conclusions.

Conclusion and suggestions

In pedagogical areas, the research culture and cultural-research competencies of students have been formed in the process of historical development and are of great importance in modern education. Research culture develops not only scientific skills and methodological approaches, but also the creative activity of the teacher, critical thinking and the ability to improve the educational process. At the same time, the development of cultural-research competencies in students serves to improve the professional qualifications of the teacher and create an effective, dynamic educational environment.

References

1. Aganov S. S., Kerimov Sh. A. Eksperimentalnыe issledovaniya texnologicheskix osnov razvitiya fizicheskoy kulturы u obuchayushixsya v vuzax GPS MCHS Rossii. – 2020.

2. Axrarova Z.B., Abdullaeva N.B. Talabalarni ilmiy faoliyatga yo‘naltiruvchi pedagogik texnologiyalar va o‘qitishning zamonaviy metodlari. Uslubiy qo‘llanma. – Toshkent: MUMTOZ SO‘Z, 2022

3. Belevitin V. A., Gnatishina Ye. A., Chernovol I. G. Magisterskaya dissertatsiya: rekomendatsii po podgotovke i zashite. – 2016
4. Busheneva Yu. Kak pravilno napisat referat, kursovuyu i diplomnuyu raboti. – Litres, 2022. -S. 9.
5. Muhammadjon o'g'li, S. A. (2026). Korreksion pedagogika asosida inklyuziv ta'limni tashkil etish. YANGI RENESSANS, 3(1), 3-8.
6. Siddiqov, A. M. O. G. L. (2025). Inkoniyati cheklangan o 'quvchilarni ijtimoiy hayotga ijobiy munosabatlarini shakllantirish modeli. Science and Education, 6(2), 339-344.
7. Siddiqov, A. M. O. G. L., & Boymirzayeva, D. M. Q. (2025). Inklyuziv ta'limni samaradorligini oshirishda qollaniladigan metod va usullar. Science and Education, 6(2), 206-209.
8. Абдуллаев, Д. Ю. Ў. (2025). Юқори синф ўқувчиларида фаол фуқаролик позициясини ривожлантиришнинг педагогик ва психологик хусусиятлари. Science and Education, 6(2), 441-452.
9. Baxtiyor, Q. (2023). O'SMIR SHAXSIDA KREATIVLIKNI SHAKLLANTIRISHDA TA'LIM TIZIMINING O'RNI. Journal of Academic Research and Trends in Educational Sciences, 178-183.
10. Қаюмов, Б. З. Ў., & Абдураҳмонов, О. А. Ў. (2021). ТАЛАБАЛАРДА ШАХСИЙ ВА ИНТЕЛЛЕКТУАЛ ФАЗИЛАТЛАРНИ ШАКЛЛАНТИРИШ МЕХАНИЗМЛАРИ. Scientific progress, 1(6), 750-754.
11. Baxtiyor, Q. (2024). THE CORRELATION RELATIONSHIP OF THE DEVELOPMENT OF CREATIVITY IN ADOLESCENTS WITH ACHIEVEMENT.
12. Muhammadinovich, J. R. S. (2025, December). PSIXOLOGIYANING FANLAR TIZIMIDAGI O 'RNI VA UNING ILMIY AHAMIYATI. In International Conference on" Current Issues in the Development of Science and Education" (Vol. 1, No. 2, pp. 167-169).
13. Jo'rayev, S. (2025). IIV akademik litseyi o'spirin o 'quvchilarida kasbiy motivatsiyaning o'ziga xos jihatlari. MAKTABGACHA VA MAKTAB TA'LIMI JURNALI, 3(12).
14. Д. Д. Ориббоева, Н. Б. Каримова Психологик тадқиқотларда буллинг муммосининг гендер тахлили // Science and Education. 2025. №3. URL: https://cyberleninka.ru/article/n/psihologik-tad-i-otlarda-bulling-mummosining-gender-tahlili (дата обращения: 14.01.2026).
15. Baxtiyor, Q. (2024). CREATIVITY AS A RESEARCH SUBJECT IN PSYCHOLOGICAL RESEARCH. American Journal Of Social Sciences And Humanity Research, 4(07), 76-80.
16. Qayumov, B. Z. (2025). O'SMIRLARDA KREATIVLIK NAMOYON BO'LISHINING HUDUDIY TAFOVUTLARI. MAKTABGACHA VA MAKTAB TA'LIMI JURNALI, 3(6).
17. Qayumov, B. Z. O. G. L., & Yo'qubxo'jayeva, M. A. Q. (2025). O'quvchilarda kreativlik rivojlanishida shaxs individual xususiyatlarni roli. Science and Education, 6(12), 627-632.
18. Jorayev, S. (2025, December). OILA MUHITINING SHAXS PSIXOLOGIYASIGA TA'SIRI. In International Conference on" Current Issues in the Development of Science and Education" (Vol. 1, No. 2, pp. 170-175).
19. Shuhratjon Shukurjon O'g'li Yoqubjanov, Dilafruz Oribboyeva Temperament va xarakter shakllanishida ijtimoiy omillarning roli // Science and Education. 2025. №12. URL: https://cyberleninka.ru/article/n/temperament-va-xarakter-shakllanishida-ijtimoiy-omillarning-roli (дата обращения: 14.01.2026).