pISSN:2349-5707 Volume:12,Issue 12,December-2025 eISSN:2349-5715

IMPROVEMENT OF THE STAFF TRAINING SYSTEM AND REFLECTIONS ON NEW PEDAGOGY OF ARCHITECTURAL AND CONSTRUCTION EDUCATION

Rakhimova Gulsara Rajapovna,
teacher at Samarkand State University of Architecture and Construction,
ORCID ID:https://orcid.org/0009-0001-9973-3006
gulsararaximova@gmail.com

Abstract: The article discusses the problems of improving the training system in the field of architectural design. The author analyzes current trends in the development of architecture and construction, as well as changes in requirements for specialists in these fields. Based on this analysis, proposals are formulated to improve the training system in the field of architectural design.

Key words: architectural design, personnel training, innovations in education, project-based learning, individual educational trajectories, active learning methods, changes in requirements for specialists.

Аннотация: В статье рассматриваются проблемы совершенствования системы подготовки кадров в сфере архитектурного проектирования. Автор анализирует актуальные тенденции развития архитектуры и строительства, а также изменения требований к специалистам в этих областях. На основании этого анализа формулируются предложения по совершенствованию системы подготовки кадров в сфере архитектурного проектирования.

Ключевые слова: архитектурное проектирование, подготовка кадров, инновации в образовании, проектное обучение, индивидуальные образовательные траектории, активные методы обучения, изменения требований к специалистам.

Annotatsiya: Maqolada arxitektura dizayni sohasida kadrlar tayyorlash tizimini takomillashtirish muammolari muhokama qilinadi. Muallif arxitektura va qurilishni rivojlantirishning hozirgi tendentsiyalarini, shuningdek, ushbu sohalar mutaxassislariga qo'yiladigan talablarning o'zgarishini tahlil qiladi. Ushbu tahlillar asosida arxitektura dizayni sohasida kadrlar tayyorlash tizimini takomillashtirish bo‘yicha takliflar ishlab chiqiladi.

Kalit so'zlar: arxitektura dizayni, kadrlar tayyorlash, ta'limdagi innovatsiyalar, loyiha asosida o'qitish, individual ta'lim traektoriyasi, faol o'qitish usullari, mutaxassislarga qo'yiladigan talablarning o'zgarishi.

Introduction. Architecture and construction are key economic sectors that play a vital role in societal development. The future of cities and infrastructure depends on the quality of personnel training in these fields. Currently, the system of personnel training in architecture and construction faces a number of pressing issues that must be addressed to ensure the sustainable development of these industries. The urgency of improving the system of personnel training in architecture and construction is determined by the following factors:

- Development of technologies and innovations. New technologies and innovations are constantly emerging in architecture and construction, requiring new knowledge and skills from specialists.

pISSN:2349-5707 Volume:12,Issue 12,December-2025 eISSN:2349-5715

- Changing requirements for specialists. In today's environment, specialists in architecture and construction must possess not only professional knowledge and skills, but also qualities such as creativity, teamwork, and critical thinking.
- Insufficient training. According to research, Russia is experiencing a shortage of qualified personnel in the fields of architecture and construction.

The aim of the article is to analyze current problems of improving the system of training personnel in the fields of architecture and construction.

Main problems. Lack of compliance of educational content with modern requirements One of the main problems of the system of training personnel in the fields of architecture and construction is the discrepancy between the educational content and modern requirements. Curricula are often outdated and do not take into account new technologies and trends in architecture and construction. This leads to the fact that graduates of educational institutions do not always have the necessary knowledge and skills to work in modern conditions. They may be unaware of new technologies, materials and construction methods, which complicates their employment. To solve this problem, it is necessary to regularly update curricula, taking into account new technologies and trends in architecture and construction. This can be done by involving industry specialists in the development of curricula, as well as by conducting research in the field of architecture and construction [1]. Insufficient level of practical training Another pressing problem of the system of training personnel in the fields of architecture and construction is the insufficient level of practical training. Students often do not gain sufficient practical experience, which makes it difficult for them to find employment after graduation. This is due to the fact that educational institutions often lack resources for practical training for students. Furthermore, students do not always have the opportunity to complete full-fledged internships in design organizations. To address this issue, it is necessary to increase the amount of practical training for students. This can be achieved by increasing the number of hours allocated to practical work, as well as by creating new opportunities for practical training for students, for example, by conducting internships and internships in industrial enterprises. Insufficient integration of education and industry. The third pressing problem in the training system for personnel in the fields of architecture and construction is the insufficient integration of education and industry [2].

Recommendations for solving problems. To address the problems of the training system in the fields of architecture and construction, it is necessary to take a number of measures, including:

- Regular updating of curricula. Curricula should be regularly updated to reflect new technologies and trends in architecture and construction.
- Increasing the volume of practical training. Students should be provided with more opportunities for practical work, for example, through internships at industrial enterprises.
- Strengthening the integration of education and industry. It is necessary to create mechanisms for interaction between educational institutions and industrial enterprises aimed at improving the quality of students' practical training.

In addition, the following factors must be taken into account:

- Forecasts for the development of architecture and construction. What new technologies and trends will shape the future development of these industries?
- Experiences of other countries. How are the problems of training personnel in the fields of architecture and construction being addressed in other countries?
- Proposals for solving the problems. What specific measures can be taken to address the problems of training personnel in the fields of architecture and construction?

Solving these problems will improve the quality of education, train specialists who meet modern requirements, and ensure their employment. [3].

It can be considered a fact that computer-aided design and the new systematization of working methods enabled by digital technologies became the main revolution in architectural practice at the end of the last century. Having overcome the ancient practice of drawing, the integration of

pISSN:2349-5707 Volume:12,Issue 12,December-2025 eISSN:2349-5715

new digital technologies also allowed for new manipulations of projected architectural images, introducing new dynamics into design practice.

Changes in pedagogy. The main problems of improving the system of training personnel in the fields of architecture and construction include the following:

• Educational content is inconsistent with modern requirements. Curricula are often outdated and fail to take into account new technologies and trends in architecture and construction.

• Insufficient practical training. Students often do not receive sufficient practical experience, which hinders their employment after graduation.

• Insufficient integration of education and industry. Industrial enterprises are not always involved in the educational process, leading to a gap between theory and practice..

Problem solving. To address these issues, a number of measures need to be taken, including:

• Regular updating of curricula. Curricula should be regularly updated to reflect new technologies and trends in architecture and construction.

• Increase the volume of practical training. Students should be provided with more opportunities for practical work, for example, through internships at industrial enterprises.

• Strengthening the integration of education and industry. Mechanisms for interaction between educational institutions and industrial enterprises should be created, aimed at improving the quality of practical training for students. [7].

Conclusion. In conclusion, it should be noted that the training system for architecture and construction in Uzbekistan faces a number of pressing issues that must be addressed to ensure the sustainable development of these industries. Improving the training system for architecture and construction is an important task that will ensure the sustainable development of these industries. The measures taken will improve the quality of education, train specialists who meet modern requirements, and ensure their employment.

To address these issues, a number of measures need to be taken, including:

- Regular updating of curricula. Curricula should be regularly updated to reflect new technologies and trends in architecture and construction.
- Increasing the volume of practical training. Students should be provided with more opportunities for practical work, for example, through internships in design and construction organizations.
- Strengthening the integration of education and industry. It is necessary to create mechanisms for interaction between educational organizations and design companies aimed at improving the quality of students' practical training.

In addition, the following factors must be taken into account:

- Forecasts for the development of architecture and construction. What new technologies and trends will shape the future development of these industries?
- Experiences of other countries. How are the problems of training personnel in the fields of architecture and construction being addressed in other countries?
- Proposals for solving the problems. What specific measures can be taken to address the problems of training personnel in the fields of architecture and construction?

Addressing these issues will improve the quality of education, train specialists who meet modern requirements, and ensure their employment. The key conclusions that can be drawn from an

pISSN:2349-5707 Volume:12,Issue 12,December-2025 eISSN:2349-5715

analysis of current challenges in improving the training system in architecture and construction are as follows:
The challenges facing the training system in architecture and construction are driven by technological advances and innovations, changing demands on specialists, and a shortage of qualified personnel.

To address these challenges, a number of measures must be taken, including regularly updating curricula, increasing the volume of practical training, and strengthening the integration of education and industry.

Furthermore, the following factors must be considered: forecasts for the development of architecture and construction, the experience of other countries, and proposals for addressing these challenges.

References:

1. Abulkhanova-Slavskaya K.A. Activity and Psychology of Personality. Moscow, 1980. – 320 p.

2. Belova I.L., Bystrova N.V., Mikhayilenko D.M. Visual Modeling as a Method of Teaching Design-Pedagogical Activity // Problems of Modern Pedagogical Education. 2021. No. 72-3. URL: https://cyberleninka.ru/article/n/vizualnoe-modelirovanie-kak-metod-obucheniya-dizayn-pedagogicheskoydeyatelnosti (date of access: 12.01.2022).

3. Demkina E.V. Sociocultural Educational Environment of the University as a Condition for the Professional Development of the Personality of a Future Specialist // Bulletin of Adyghe University. Series 3, Pedagogy and Psychology. 2008. Issue 7. Pp. 45-51.

4. Ishchuk V. V., Nagibina M. I. Development of Creative Potential of Students of Pedagogical Universities (Colleges) by Means of Animation // ITS. 1997. No. 4. URL: https://cyberleninka.ru/article/n/razvitie-tvorcheskogo-potentsiala-studentovpedagogicheskih-vuzov-kolledzhey-sredstvami-animatsii (date of access: 22.02.2022)

5. Zeer E. F., Popova L. S. Influence of the Level of Creativity on Overcoming Barriers to Professional Development of Teachers // Education and Science. 2012. No. 1. URL: https://cyberleninka.ru/article/n/vliyanie-urovnya-kreativnosti-na-preodoleniebarierov-professionalnogo-razvitiya-pedagogov (date of access: 14.02.2022).

6. Kolpakova E.N. Remote assessment of the quality of additional professional programs of pedagogical focus // Problems of modern pedagogical education. 2021. No. 71-1. URL: https://cyberleninka.ru/article/n/ udalennaya-otsenka-kachestva-dopolnitelnyh-professionalnyh-programmpedagogicheskoy-napravlennosti (date of access: 14.01.2022).

7. Kolchina V.V. Optimization of motivation management of the university teaching staff // Problems of modern pedagogical education. 2021. No. 71-1. URL: https://cyberleninka.ru/article/n/optimizatsiya-upravleniya-motivatsieypedagogicheskogo-kollektiva-universiteta (date of access: 15.01.2022).

8. Likhacheva E.A. Pedagogical stimulation of educational activity as a function of a teacher of a modern university // Ped.Rev.. 2020. No. 6 (34). URL: https://cyberleninka.ru/article/n/pedagogicheskoe-stimulirovanie-uchebnoydeyatelnosti-kak-funktsiya-prepodavatelya-sovremennogo-vuza (date of access: 17.01.2022).

pISSN:2349-5707 Volume:12,Issue 12,December-2025 eISSN:2349-5715

9. Mazilov V.A., Kostrigin A.A. The Problem of Pedagogical Abilities in Modern Foreign Psychology // Psychology and Psychotechnics. - 2021. - No. 2. - Pp. 68 - 85.

10. Mikhalchenko M.S. New Technologies in Design Education of Higher Education // Problems of Modern Pedagogical Education. 2020. No. 69-1. URL: https://cyberleninka.ru/article/n/novye-tehnologii-v-dizayn-obrazovanii-vyssheyshkoly (date of access: 12.01.2022).

11. Plotnikova E.V., Dorofeeva E.N., Kondrov A.V., Kondrova E.A. Pedagogical Guidance of Student Designers' Project Activities // Pedagogical Journal of Bashkortostan. 2020. No. 3 (88). URL: https://cyberleninka.ru/article/n/pedagogicheskoe-rukovodstvo-proektnoy-deyatelnostyu-studentov-dizaynerov (date of access: 22.02.2022).

12. Slastenin V. A., Isaev I. F., Shiyanov E. N. / Ed. V. A. Slastenin. Pedagogy: Textbook for students of higher pedagogical educational institutions / - M .: Publishing Center "Academy", 2013. - 576 p.

13. Махамов, Б. (2023). Экологические аспекты бионической архитектуры в городах новом веке. Тенденции и перспективы развития городов, 1(1). извлечено от https://inlibrary.uz/index.php/prospects-urban-development/article/view/27242

14. Махамов, Б. (2023). Экологические аспекты бионической архитектуры в городах новом веке. Тенденции и перспективы развития городов, 1(1).

15.Ачилов, Ш. Д., & Махамов, Б. С. (2023). К вопросу о восстановлении традиций архитектурной среды исторической европейской части Самарканда (на примере квартала вокруг торгового центра «Makon mall»).

16. THE WORLD OF ARCHITECTURAL INNOVATION AND AI: COLLABORATING TO CREATE THE FUTURE. (2024). International Journal of Artificial Intelligence, 4(09), 429-432. https://www.academicpublishers.org/journals/index.php/ijai/article/view/1693

17. METHODS OF APPLYING DIGITAL TECHNOLOGIES UNDER DESIGN PROCESS. (2024). Innovative: International Multidisciplinary Journal of Applied Technology (2995-486X), 299-300. https://multijournals.org/index.php/innovative/article/view/1301

18. Махамов, Б. (2023). Экологические аспекты бионической архитектуры в городах новом веке. Тенденции и перспективы развития городов, 1(1). извлечено от https://inlibrary.uz/index.php/prospects-urban-development/article/view/27242