IMPROVING THE METHODOLOGY FOR DEVELOPING PROFESSIONAL CREATIVITY IN FUTURE PHARMACISTS

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Abstract: *In the context of rapid development of pharmaceutical science and healthcare systems, the professional training of future pharmacists requires not only strong theoretical knowledge and practical skills, but also a high level of professional creativity. The ability to think creatively enables pharmacists to solve non-standard professional problems, adapt to innovative technologies, and ensure the rational use of medicines. This article examines the theoretical foundations and practical approaches to improving the methodology for developing professional creativity in future pharmacists. Modern pedagogical technologies, interactive teaching methods, and competency-based education are analyzed as effective tools for enhancing creative professional competencies. The study substantiates the necessity of improving educational methodologies aimed at fostering creativity in pharmaceutical education.*

Keywords: *professional creativity, future pharmacists, pharmaceutical education, innovative pedagogy, competency-based approach.*

Introduction

The modernization of higher pharmaceutical education places new demands on the professional competencies of future pharmacists. Today's pharmacist is not only a specialist in drug preparation and distribution, but also an active participant in healthcare decision-making, patient counseling, and

pharmaceutical innovation. In this regard, the development of professional creativity becomes an essential component of professional training.

Professional creativity allows future pharmacists to independently analyze complex situations, generate innovative solutions, and effectively apply theoretical knowledge in practice. Therefore, improving the methodology for developing professional creativity in future pharmacists is a relevant pedagogical problem that requires scientific justification and practical implementation.

Professional creativity is understood as an integrative personal quality that includes creative thinking, problem-solving skills, motivation for innovation, and readiness for professional self-development. In pharmaceutical education, creativity manifests itself in clinical decision-making, pharmaceutical care planning, research activities, and the development of new pharmaceutical products.

Modern pedagogical research emphasizes that professional creativity does not develop spontaneously but requires a well-structured educational environment. This environment should be based on student-centered learning, interdisciplinary integration, and active teaching methods that stimulate independent and creative thinking.

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Methodological approaches to developing professional creativity

Improving the methodology for developing professional creativity in future pharmacists involves the integration of innovative pedagogical approaches into the educational process. The most effective methodological approaches include:

- **Competency-based approach**, which focuses on the formation of professional, communicative, and creative competencies;
- **Problem-based learning (PBL)**, aimed at solving real-life pharmaceutical problems;

- **Project-based learning**, which encourages students to conduct research and develop innovative pharmaceutical solutions;
- **Interactive teaching methods**, such as case studies, simulations, role-playing, and discussions.

These approaches promote active student participation, critical thinking, and the practical application of knowledge, which are essential for creative professional development.

Pedagogical conditions for enhancing professional creativity

The effectiveness of the methodology for developing professional creativity depends on specific pedagogical conditions, including:

- The creation of a creative educational environment;
- The use of modern digital technologies and virtual laboratories;
- The integration of scientific research into the educational process;
- Continuous assessment and reflection on students' creative achievements.

Under these conditions, future pharmacists develop motivation for creativity, confidence in professional decision-making, and readiness for innovative activity.

Conclusion

Improving the methodology for developing professional creativity in future pharmacists is a crucial task of modern pharmaceutical education. The integration of innovative pedagogical technologies, competency-based education, and interactive learning methods significantly enhances the creative potential of students. As a result, future pharmacists become more adaptable, innovative, and professionally competent specialists capable of meeting the challenges of contemporary healthcare systems.

Further research should focus on experimental validation of the proposed methodology and the development of assessment criteria for professional creativity in pharmaceutical education.

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REFERENCES

1. O‘zbekiston Respublikasi Prezidenti Qarori PQ–4884. “Raqamli O‘zbekiston – 2030” strategiyasini amalga oshirish chora-tadbirlari to‘g‘risida, 2020-yil.

2. Rustamov M. Use of modern methods in teaching “information technology” in medical education //Science and innovation. – 2023. – T. 2. – №. A7. – C. 30-33. science and innovation international scientific journal volume 4 issue 11 november 2025 issn: 2181-3337 | scientists.uz 268

3. Rustamov M. Improving the methodology of teaching the subject “Information technologies and modeling of technological processes” in an innovative educational environment //Science and innovation. – 2023. – T. 2. – №. B7. – C. 58-61.

4. Rustamov M. Rustamov Murodil Makhammadzhanov Teaching computer science in higher education: problems and solutions: The rapid development of information and communication technologies in our country is due to state support, which allows us to confidently enter the world information community //Архив исследований. – 2020. – С. 5-5.

5. Rustamov M. Enhance students'knowledge and skills with multimedia tools in an innovative educational environment //Science and innovation. – 2023. – T. 2. – №. B10. – C. 43-45.

6. Rustamov M. Tibbiy ta'limda innovatsion ta’lim metodlari va ta’lim vositalaridan foydalanishning afzalliklari (Axborot texnologiyalari va jarayonlarni matematik modellashtirish faniga tadbiqi misolida) //News of the NUUz. – 2024. – T. 1. – №. 1.5. 1. – C. 197-199

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