JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

STRATEGIES FOR IMPROVING PROFESSIONAL COMPETENCE BASED ON PROJECT-BASED TECHNOLOGY

Anvarovna Dilnoza Akhmedova
2nd year PhD student
Kokand State Pedagogical Institute

Abstract: The education system in Uzbekistan has been developing rapidly in recent years. Strategies are being developed to improve the quality of education through the use of innovative approaches and modern methodologies. Project-based technologies play an important role in the educational process and are considered an effective tool for improving professional competence. The leading method in developing this technology is the analysis of scientific and methodological literature and practical experience, which allows us to identify its main elements: diagnostic tasks, diagnostic objects, a set of procedures based on the principles of systematic pedagogical diagnostics, tools and diagnostic tools. The article proposes the main components of assessing the development of professional competence in the process of improving the qualifications of students and their quality indicators.

Keywords: Project-based technologies, project-based, technology, assessment, diagnostic techniques, advanced training, professional competence.

Introduction

The resolution of the President of the Republic of Uzbekistan Shavkat Mirziyoyev "On measures to develop the education system in the Republic of Uzbekistan" dated October 30, 2017 marked the beginning of a new stage in the field of education. This resolution pays special attention to improving the quality of education, introducing modern pedagogical technologies, and improving the professional competence of employees. Project technologies allow for the use of interactive approaches in teaching. Project-based learning methods are being expanded in Uzbekistan. For example, the program "Project-based learning in general subjects", developed by the Ministry of Public Education of the Republic of Uzbekistan, encourages teachers and students to acquire knowledge through projects. In this process, students learn to solve real-life problems, which develops their creativity and critical thinking skills. The use of modern technologies in the educational process is also expanding in Uzbekistan. For example, online educational platforms and digital resources are being created within the framework of the "Digital Uzbekistan" program, which is being implemented by the Ministry of Innovative Development of the Republic of Uzbekistan. These platforms help employees acquire new knowledge and make the educational process more effective. It is important to develop teamwork skills in the educational process. The importance of teamwork and its methodologies are being studied through trainings and seminars for teachers in Uzbekistan. A study conducted by the State Inspectorate for Quality Control of Education of the Republic of Uzbekistan (2020) showed that improving the skills of teachers through teamwork is 25% more effective. In order to maintain competitiveness and achieve success in the modern labor market, the need to improve professional competence is more important than ever. Project technologies provide new opportunities and approaches in this process. They serve not only to optimize project

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

management processes, but also to develop the knowledge and skills of employees. This article will consider in detail the strategies for improving professional competence based on project technologies. The scientific and methodological validity of diagnostic procedures and methods for studying students' professional skills is intended to ensure the effectiveness and dynamism of educational management, the early detection of professional deformations and their correction in the process of advanced training, as well as in the process of personal and professional self-development. In this regard, this article is aimed at developing technologies for assessing the professional competence of students in the process of advanced training.

1. Education and Training

The first strategy for enhancing professional competencies can be identified as education and training. In today's work environment, employees need to continuously update their knowledge in order to adapt quickly to changes. Educational programs that include project technologies should cover the following aspects:

• Fundamentals of Project Management: Providing employees with essential knowledge on project planning, execution, and monitoring.

• Innovative Technologies: Developing skills to learn new technologies and apply them in practice

• Teamwork Skills: Ensuring effective communication and collaboration in team settings.

Interactive methods, such as simulations, group discussions, and practical exercises, should be employed in the educational process to ensure active participation from employees. The education process ensures the professional development of employees. Numerous studies today show that education and training have a direct impact on the success of organizations. For example, a study conducted by Bersin by Deloitte (2019) indicated that when organizations provide educational and developmental opportunities to their employees, their job satisfaction increases by 30%.

Training in project management equips employees with the necessary knowledge for project planning, execution, and monitoring. The "PMBOK Guide" (2021) published by the Project Management Institute (PMI) encompasses the fundamental processes and methodologies of project management. This guide provides employees with the necessary knowledge to learn and apply the basics of project management in practice.Modern technologies play a crucial role in the educational process. Online learning platforms, such as Coursera, edX, and Udemy, offer employees opportunities to learn new technologies. A study conducted by UNESCO in 2020 found that the effectiveness of online education is 25% higher compared to traditional teaching methods.

2. Practical experience

It is important to increase the professional competence of teachers by providing them with practical experience. In Uzbekistan, practical seminars and trainings are being held for teachers as part of the state program "Development of Education". These events allow teachers to test their knowledge in real situations. Practical experience allows teachers to apply their theoretical knowledge in practice. This process allows teachers to test their knowledge in real-life situations, apply new pedagogical methods, and exchange experiences. Shulga (2018) emphasizes that

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

"practical experience provides teachers not only with theoretical knowledge, but also with skills to solve real-life problems." Gulomov (2020) says: "Practical seminars and trainings for teachers help make their pedagogical activities more effective. "Practical seminars and trainings for teachers in Uzbekistan are important for the development of the education system. Within the framework of these events, teachers are provided with information on new pedagogical technologies, project-based learning methods, and modern teaching methods. For example, practical seminars organized by the Ministry of Public Education of the Republic of Uzbekistan allow teachers to use modern technologies and master interactive methods. In addition, trainings held at the Tashkent State Pedagogical University introduce teachers to innovative approaches.

It is very important to reinforce theoretical knowledge with practical experience. Project technologies allow employees to test their skills in real situations. The following methods can be used to increase practical experience:

• Internships: Organize project-based internships for employees, through which they will have the opportunity to apply their knowledge in practice.

• Mentoring programs: Support and guidance of new employees by experienced professionals.

• Participation in projects: Increasing the experience of employees by involving them in active participation in various projects.

This process helps employees to self-assess and apply their knowledge in practice.

3. Innovative approaches

The importance of innovative approaches and approaches help to modernize the educational process. They:

• Ensure active participation of students.

• Increase the creativity of teachers.

• Improve the quality of education.

I. Types of innovative approaches

Project-Based Learning:

• Students work on a specific project, in the process of which they have the opportunity to apply theoretical knowledge in practice.

• Example: Students develop a project to solve social problems.

II. Interactive teaching methods:

• There is active communication and exchange of ideas between the teacher and students.

• Example: Group discussions, role-playing games and simulations.

III. Flipped Classroom

• Students study the course materials at home, while practical exercises are carried out in the classroom.

• This approach develops independent thinking of students.

IV. Use of technology:

• Modern technologies, such as interactive whiteboards, online platforms and mobile applications, make the learning process more interesting and effective.

• Example: Teachers can conduct classes on platforms such as Google Classroom or Zoom.

V. Differentiated learning:

• Providing education according to the individual needs of each student.

• Teachers can prepare tasks of different levels and divide students into groups according to their abilities.

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

In the implementation of innovative approaches, a number of factors are important in the implementation of innovative approaches in the education system:
• Teacher training: Trainings and seminars should be held so that teachers are familiar with new methods and technologies.
• Provision of resources: It is important to provide the necessary materials and technologies for the implementation of innovative approaches.
• Systematic approach: It is necessary to draw up a plan for the implementation of innovative approaches at all stages of the education system.
The use of project technologies allows the development of innovative approaches. Giving employees the freedom to develop and implement new ideas increases their creativity. The following strategies can be used to develop innovative approaches:
• Competitions for innovative ideas: Identifying and rewarding the best ideas among employees.
• Brainstorming sessions: Creating opportunities for employees to listen to their ideas and implement them.
• Testing new technologies: Allowing employees to test new tools and technologies.
This approach increases employee motivation and develops their professional competence.

3. Teamwork and Collaboration

Teamwork is a group of people working together to achieve a common goal. In this process, each member contributes their knowledge, skills, and experience, improving the overall results of the team. Key characteristics of teamwork. Interdependence: Team members are interdependent, and each of them contributes to the success of the team. Problem solving: Team members work together to identify problems and find ways to solve them. Generating new ideas: Innovative solutions emerge by combining different ideas and perspectives.
Collaboration is a process of mutual assistance between two or more individuals or organizations to achieve goals. Collaboration in education has the following advantages:
• Pooling resources: Organizations or individuals pool their resources and gain greater opportunities.
• Multifaceted approach: Each partner brings their own expertise to the problem, resulting in a multifaceted approach to solving the problem.
• Learning and development: Through the exchange of experiences in the collaborative process, all participants gain new knowledge and skills.
The scientific approach is the use of systematic and analytical methods in the process of research and learning. The main aspects of teamwork and collaboration associated with the scientific approach are:
• Research methodology: Team members jointly select research methods, collect and analyze data.
• Evaluation of results: The results achieved in teamwork are evaluated and analyzed on a scientific basis.
• Impact: The results of teamwork can have an impact on a wider audience, as it includes the opinions of a large number of experts.
The following strategies can be used to develop teamwork and collaboration:
• Open communication: Ensure open and honest communication between team members.
• Information exchange: Create platforms for mutual experience and knowledge exchange.
• Goal setting: Set clear tasks and goals for each team member.

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

• Training programs: Conduct training to improve the skills of team members.
Project technologies encourage teamwork. Working in a team environment helps to develop employees' communication skills. The following methods can be used to encourage teamwork.
The importance of teamwork and cooperation in educational processes in Uzbekistan is increasing. These approaches serve to improve the quality of education, develop innovative solutions, and expand opportunities for the exchange of new knowledge. The need to strengthen teamwork and cooperation for the development of the Uzbek education system is more urgent than ever.
5. Use of technological tools
Modern technologies play a major role in increasing professional competence. By using project technologies, employees can use the following tools:
• Project management software: For example, tools such as Trello, Asana help to manage projects effectively.
• Online learning platforms: Through platforms such as Coursera, Udemy, employees have the opportunity to learn new knowledge.
• Communication and collaboration tools: Tools such as Slack, Microsoft Teams help to make teamwork more effective. These tools help employees increase productivity.
As for technological changes in the education system in Uzbekistan,
The government of Uzbekistan is implementing a number of reforms to modernize the education system. As part of these reforms, the use of technological tools is developing in the following areas:
• Digital educational platforms: In Uzbekistan, online resources are being provided for students and teachers through digital educational platforms (for example, "Maktab.uz").
• Smart schools: Interactive educational technologies and digital tools are being introduced in modern schools.
• Innovations in education: Modern pedagogical methods and technologies are used in the training and professional development of teachers.
Courses and trainings through these platforms in Uzbekistan. Employees can study in various fields, for example, IT, marketing, management and others. Also, after obtaining certificates and completing their studies, employees can receive international certificates, which will help them in their professional development. Another important aspect is flexibility: The advantages of the online education format are the ability to study regardless of time and place.
Modern technologies play an important role in improving professional competence in the Uzbek education system. Project management programs, online learning platforms and communication tools help employees increase their efficiency. Education in Uzbekistan

4. Evaluation and improvement of results

The process of evaluating and improving results is important in any educational or work activity. The following approaches and methods can be considered for evaluating and improving results using modern technologies in the education system of Uzbekistan.
Evaluation of results is important in the process of improving professional competence. By evaluating results, the organization can monitor the development of employees and make changes where necessary. The following methods can be used in the evaluation process. From the evaluation methods, quantitative evaluation- The results of students or employees are measured in numbers. This is done using tests, exams or other statistical indicators.

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

Qualitative evaluation- Qualitative evaluation by analyzing students' written work, projects or presentations. This method more closely measures students' thinking, creativity and problem-solving abilities. Introduction of innovative technologies: Incorporating innovative technologies such as virtual reality (VR), augmented reality (AR), and artificial intelligence (AI) into the educational process. Periodic evaluation in monitoring results is the periodic assessment of the educational process and the monitoring of results. Monitoring systems are the implementation of monitoring systems for teachers and administrators, which allow monitoring the results in real time. The process of evaluating and improving results plays an important role in increasing the efficiency of the education system. With the help of modern technologies and innovative approaches, this process can be made more effective. By using these methods in the education system of Uzbekistan, it is possible to increase the level of knowledge of students, develop their professional competencies, and improve the overall quality of education.

Conclusion

Practical experience is important in improving the professional competence of teachers. Practical seminars and trainings held in Uzbekistan allow teachers to test their knowledge in real situations, thereby developing their professional skills. This process will make it possible to improve the quality of education and introduce modern pedagogical methods. Strategies for improving professional competence based on project technology are important in developing the knowledge and skills of employees. Through education, practical experience, innovative approaches, teamwork and the use of modern technologies, organizations can improve the professional competence of their employees. This, in turn, will lead to the overall success of the organization. In the future, with the development of project technologies, there will be a need to develop more effective methods of strategies for improving professional competence.

References:

Shayakubov, S. K., Yuldasheva, S. K., Yuldashev, S. Z., & Akhmedova, D. A. (2022, November). THE ROLE OF ASSESSMENT ON ENGLISH FOR THE INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH. In *INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION"* (Vol. 1, No. 3, pp. 111-121).

Anvarovna, A. D., & Batirovich, T. B. (2023). EFFECTIVENESS OF INTEGRATING PROJECT-BASED LEARNING INTO ESP COURSES FOR IMPROVING ESP TEACHING TO IPER (THE INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH) PHARMACY STUDENTS “Web of Scientist: International Scientific Research Journal”.

AXMEDOVA, D. (2024). BO‘LAJAK TIBBIYOT XODIMLARIGA INGLIZ TILINI INTELLEKTUAL O‘QITISHDA INNOVATSION YONDASHUVLARNI TAKOMILLASHTIRISH. *News of the NUUz*, *1*(1.10. 1), 49-51.

Dilnoza, A. (2024). TIBBIYOT OLIY O‘QUV YURTLARIDA INGLIZ TILI O’QITISHDA TALABALARNING KASBIY KOMPETENTSIYANI METODIK TAKOMILLASHTIRISH TEXNOLOGIYALARI. *MODERN EDUCATIONAL SYSTEM AND INNOVATIVE TEACHING*

SOLUTIONS, *1*(3), 105-109.

Нормуродова, М. А., & Аҳмедова, Д. А. (2023). ПЕДАГОГНИНГ КАСБИЙ МАҲОРАТИНИ ШАКЛЛАНТИРИШНИНГ ДОЛЗАРБЛИГИ. *Innovative Development in Educational Activities*, *2*(23), 59-61.

Botirovich, T. B., Anvarovna, A. D., & Turdaliyevich, T. M. (2023). ESP AND STUDENTS'NEEDS IN LEARNING ENGLISH FOR PHARMACY. *INTERNATIONAL JOURNAL OF SOCIAL SCIENCE & INTERDISCIPLINARY RESEARCH ISSN: 2277-3630 Impact factor: 7.429*, *12*(01), 169-172.

Anvarovna, A. D., & Abdullayevna, N. M. (2023). Language and Instructional Methodology CLIL in Pharmacy Universities. *Journal of Science-Innovative Research in Uzbekistan*, *1*(8), 179-183.

Akhmedova, D. A. (2023). TEACHING STRATEGIES AND ASSESSMENT METHODS FOR ONLINE PHARMACY EDUCATION. *THE ROLE OF SCIENCE AND INNOVATION IN THE MODERN WORLD*, *2*(7), 27-33.

Anvarovna, A. D. (2024). Implementing Suggestopedia and Memory Training in the Foreign Language Classroom. *Journal of Innovation in Education and Social Research*, *2*(2), 72-76.

Khalmurzayevna, Y. S., & Zairjanovich, Y. S. (2024). Teaching English Grammar to Iper Students within Internet Resources. *Best Journal of Innovation in Science, Research and Development*, *3*(3), 462-472.

Khalmurzayevna, Y. S., & Zairjanovich, Y. S. (2023). The Perspectives of English Teachers' Pedagogic Competence In Teaching English Through Online and Offline Tools. *American Journal of Language, Literacy and Learning in STEM Education (2993-2769)*, *1*(7), 111-121.

Zairjanovich, Y. S. (2024). THE COMPETENCE OF ENGLISH LANGUAGE PROFICIENCY OF FUTURE ECONOMISTS. *Gospodarka i Innowacje.*, *53*, 182-188.

Khalmurzayevna, Y. S., & Zairjanovich, Y. S. (2024). PLANNING AUDIT INSPECTION OF ENVIRONMENTAL ASPECTS OF ENTERPRISE ACTIVITY. *Ethiopian International Journal of Multidisciplinary Research*, *11*(05), 373-378.

Khalmurzayevna, Y. S., & Zairjanovich, Y. S. (2024). Improvement Of Social Skills As A Key To Professional Development Of A Pharmaceutical Staff. *International journal of artificial intelligence*, *4*(03), 88-93.

Нормуродова, М. А., & Аҳмедова, Д. А. (2023). ПЕДАГОГНИНГ КАСБИЙ МАҲОРАТИНИ ШАКЛЛАНТИРИШНИНГ ДОЛЗАРБЛИГИ. *Innovative Development in Educational Activities*, *2*(23), 59-61.

Akhmedova, D. A. (2023). Strategies for Increasing Awareness of Pharmaceutical Students'

JOURNAL OF APPLIED SCIENCE AND SOCIAL SCIENCE
eISSN 2229-3113 pISSN 2229-3205
Volume 15 Issue 02, February 2025
Impact factor: 2019: 4.679 2020: 5.015 2021: 5.436, 2022: 5.242, 2023: 6.995, 2024 7.75

Divergences. *Miasto Przyszłości*, *31*, 277-280.

Talipov, B. B., Akhmedova, D. A., & Toshkhonov, M. T. (2023, February). THE DEVELOPMENT OF PBL TEACHING METHOD FOR TEACHING PRACTICAL ENGLISH IN IPER (INSTITUTE OF PHARMACEUTICAL EDUCATION AND RESEARCH). In *INTERNATIONAL SCIENTIFIC CONFERENCE" INNOVATIVE TRENDS IN SCIENCE, PRACTICE AND EDUCATION"* (Vol. 2, No. 2, pp. 5-12).

Talipov, B., Normuradova, M. T., Akhmedova, D., & Taryanikova, M. (2023). JIGSAW STRATEGY TO TEACHING IPER STUDENTS. *Solution of social problems in management and economy*, *2*(13), 185-195.

Yang, J. H., & Limbu, L. M. (2022). Advocating for Project-Based Learning and Education for Sustainable Development in the Present Context Where the World Is Facing Mega Educational Challenges and Crises. Journal of Education for Sustainable Development, 16(1), 5-21.