

Pedagogical conditions for developing students' professional competence based on pedagogical facilitation

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Abstract: This article analyzes the significance and opportunities of using a pedagogical facilitation approach in the formation of students' professional competence. Facilitation is viewed as a pedagogical technology that ensures active student participation in the learning process, fosters independent thinking, and develops problem-solving skills. The research identifies the components of professional competence (such as professional knowledge, skills, communicative abilities, reflective culture, and others) as well as the pedagogical conditions influencing their development (motivational environment, interactive methods, collaborative learning activities, mentoring systems, etc.).

Keywords: education and upbringing, pedagogical facilitation, professional competence, results of experimental studies, efficiency, academic performance indicators, control group, experimental group, and others

Introduction

Today, the process of creating pedagogical conditions for developing students' professional competence based on pedagogical facilitation in higher education institutions is considered one of the priority areas within the educational systems of many countries. Globally, this process serves the goals of improving the quality and efficiency of education as well as enhancing learners' integration into society and the labor market. In the modern world, higher education institutions are increasingly required to align their activities not only with national but also international standards.

Therefore, educational reforms and improvements are being carried out worldwide, largely through broad-based research initiatives and the exchange of best practices.

Global experience shows that leading countries across various continents - including Europe, North America, and Asia - place significant emphasis on adapting educational curricula to modern requirements, supporting the professional development of teachers, and improving the material and technical resources of educational institutions to enhance the quality of education. For instance, Finland has succeeded in creating one of the highest-quality educational systems in the world by continuously updating its educational approaches. This strategy enables educational

institutions to create the most effective learning environments for students and contributes significantly to the development of their professional competence.

Similarly, South Korea pays special attention to optimizing the educational process by widely integrating digital educational resources. Digital technologies enable students to independently expand their knowledge and acquire new skills, while also allowing educators to provide more individualized instruction, leading to improved educational outcomes.

In the United States, universities integrate practice and research to develop students' professional competence. Students have the opportunity to deepen their professional skills by applying theoretical knowledge in practical contexts, which helps them better understand their future professions and prepare thoroughly for their careers.

Purpose of the Study: The purpose of the study is to develop recommendations for enhancing students' professional competence based on pedagogical facilitation.

Objectives of the Study:

- To identify the pedagogical opportunities for developing students' professional competence through pedagogical facilitation;
- To select effective methods and improve the methodological foundations for the development of professional competence through pedagogical facilitation;
- To improve the assessment criteria for evaluating the development of students' professional competence based on pedagogical facilitation;
- To assess the impact of pedagogical facilitation on students' professional competence and develop recommendations for its further improvement based on research results.

Methods: The study employed a combination of theoretical methods (study and analysis of educational and methodological literature, comparison, analogy), diagnostic methods (surveys, testing, observation), prognostic methods (evaluation of educational outcomes, expert evaluations, synthesis of independent assessments, modeling), pedagogical experimental methods, and mathematical and statistical data analysis techniques.

Research Object: The object of the study is the process of developing students' professional competence based on pedagogical facilitation. A total of 425 students from Tashkent State Pedagogical University, Gulistan State University, and Bukhara State Pedagogical Institute participated in the research.

Research Procedure: The process of developing students' professional competence through pedagogical facilitation was carried out in several stages, each of which had distinct importance.

The diagnostic stage laid the groundwork for the experimental study. During this phase, the essence of activities implemented in higher education institutions and their

legal and normative foundations were thoroughly examined. Additionally, pedagogical methods aimed at fostering social relations among students were developed, and ways to enhance the effectiveness of these processes were explored.

The mechanisms of cooperation between higher education institutions and their operational systems were analyzed, as well as the effectiveness of students' participation in various social and public events using targeted differential and individual approaches. Moreover, attention was paid to how students planned their leisure activities, their involvement in educational institutions, and the participation of administrators and parents in these processes.

Questionnaires designed for administrators and teachers of higher education institutions focused on identifying factors that influence the strengthening of students' professional competence and barriers encountered in practice. Analysis of the survey results provided insights into the social relationships among students studying in different fields under the conditions of pedagogical facilitation. Additionally, responses concerning teachers' pedagogical activities, collaboration forms, and methods of working with students were collected.

Thus, the analyses and findings from the diagnostic stage provided essential preliminary information for carefully planning and effectively conducting the subsequent stages of the experimental study. This stage clarified the necessary pedagogical actions to be taken for developing professional competence among students, thereby creating a solid foundation for the next phases of the research.

The third and final stage of the experimental study focused on evaluating the effectiveness of the seminars and training sessions conducted. During this stage, the knowledge, skills, and abilities acquired by students and teachers were tested, and the level of development of their professional competencies was assessed. Within the framework of seminars and training sessions, various situations involving professional competencies were created, and students demonstrated how they applied their newly acquired skills to resolve problematic scenarios. Students showcased their skills in collaboration, communication, and teamwork.

Furthermore, the responses provided by both teachers and students were analyzed. This information played a significant role in identifying areas that needed improvement and how future educational programs could be enhanced. Students' and teachers' experiences and feedback enabled the formulation of suggestions for making seminars and training sessions more effective and engaging. The result analysis process also included the evaluation of survey and test results conducted among students, which showed the extent to which students' professional competencies had improved and helped to identify areas that required additional educational resources or support measures.

Results

The development of students' professional competence through pedagogical facilitation was achieved by conducting an in-depth analysis of the pedagogical activities of higher education institutions and implementing new methodologies and pedagogical approaches aimed at meeting students' socio-psychological and pedagogical needs.

These efforts, which focused on enhancing students' social interaction, collaboration, and supporting their personal and professional growth, contributed significantly to improving the effectiveness of the educational process.

As a result, it was observed that the development of students' professional competence based on pedagogical facilitation led to the following improvements, confirmed through mathematical and statistical analysis:

- According to the axiological criterion, the efficiency of academic achievement increased by a factor of 1.15 (15%);
- According to the gnoseological criterion, the efficiency of academic achievement increased by 1.14 (14%);
- According to the praxeological criterion, the efficiency of academic achievement also increased by 1.14 (14%).

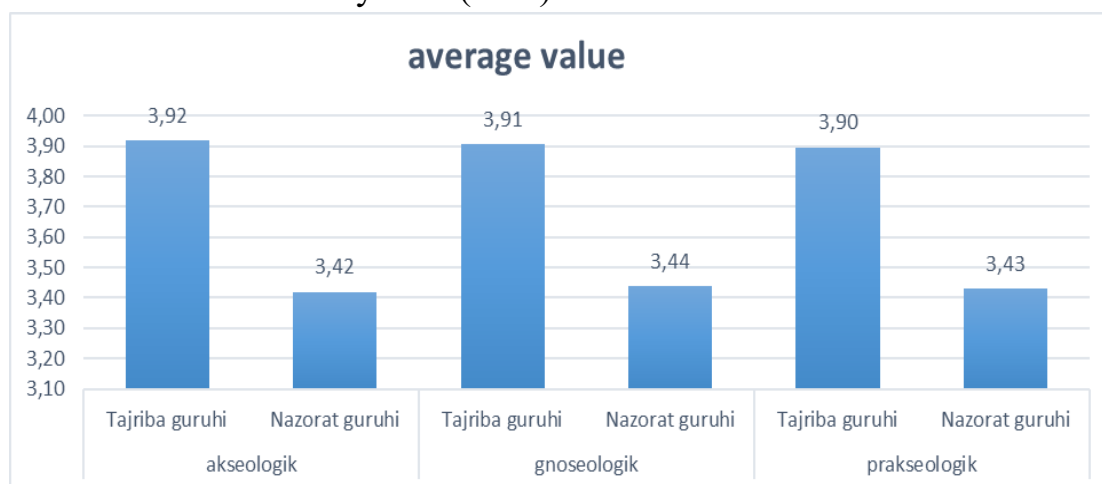


Figure 1. Comparative analysis of the average academic performance of the experimental and control groups upon completion of the study

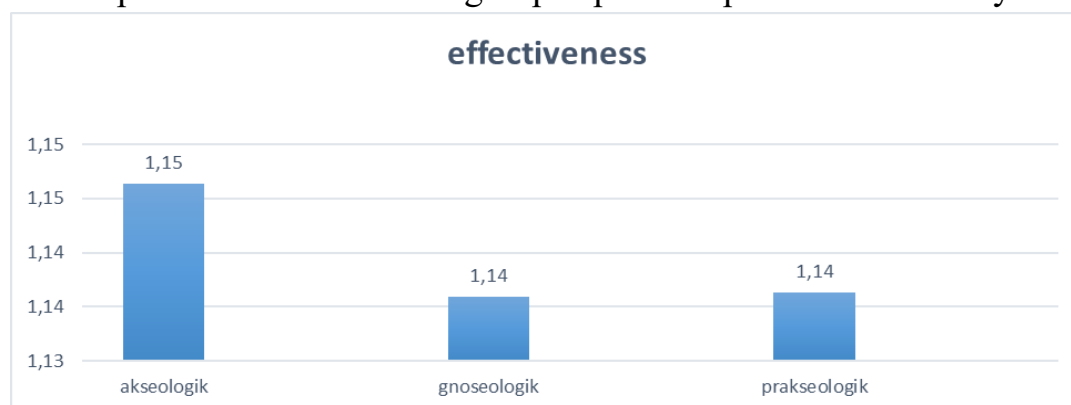


Figure 2. Comparative effectiveness indicators of the experimental group relative to the control group at the conclusion of the experiment

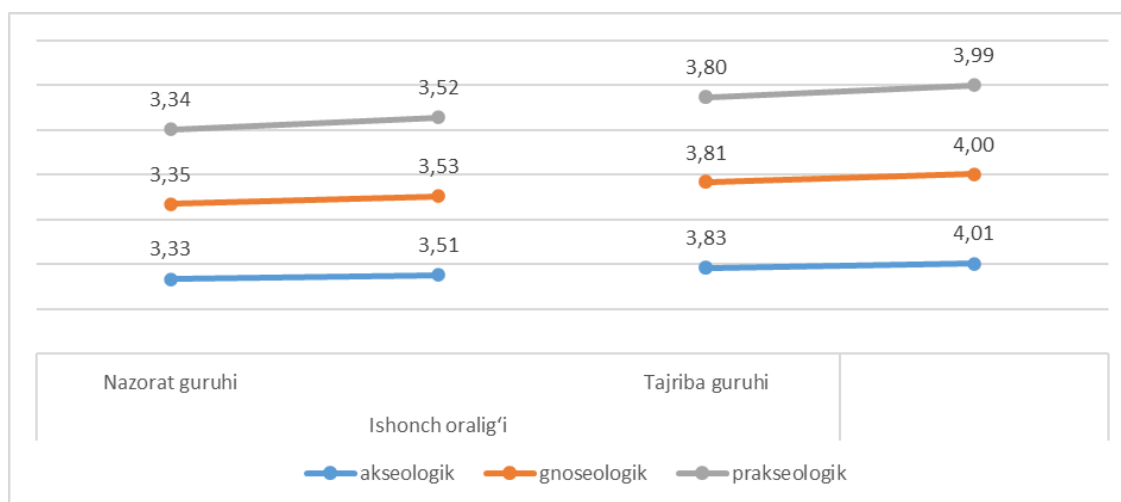


Figure 3. Confidence interval analysis of the average values for the experimental and control groups upon completion of the study

These outcomes were also visually supported by diagrams illustrating the average academic performance indicators, efficiency coefficients, and geometric interpretations of confidence intervals.

Thus, the organization and outcomes of the experimental work carried out through pedagogical facilitation are crucial in enhancing students' professional competence. Through these processes, students gain the opportunity to develop the knowledge, skills, and perspectives necessary for effectively performing their professional activities.

Discussion

The rapid socio-economic changes occurring in modern society are imposing new and complex demands on the education system, making it necessary to modernize particularly the system of higher pedagogical education. This modernization, in turn, requires the introduction of new pedagogical approaches aimed at developing students' general and professional competencies. Accordingly, in this dissertation, the processes of developing students' professional competence through pedagogical facilitation were deeply analyzed both theoretically and practically.

The research highlighted the conceptual foundations of pedagogical facilitation and explored the theoretical aspects of its application as a professional pedagogical necessity. The significance of pedagogical facilitation in the development of students' professional competence and the systematic approaches to its implementation in practice were extensively discussed. This process provided opportunities to create the necessary conditions for supporting students' unique abilities, interests, and professional development.

The study identified the pedagogical conditions necessary for the development of students' professional competence and clearly described the mechanisms of pedagogical facilitation. The role of pedagogical facilitation in enhancing teachers'

professional competencies was also examined, as well as the contribution of interdisciplinary integration to students' learning processes. Pedagogical facilitation was found to establish a strong pedagogical foundation for the effective development of students' professional competencies.

The effectiveness of organizing various activities involving students - such as lessons, competitions, conferences, academic Olympiads, mini-lectures, discussions, both in and outside the classroom - was demonstrated. The use of video lessons, business games, and a variety of other methodological approaches proved to be highly effective.

The analysis of the content and results of the experimental studies aimed at developing students' professional competence through pedagogical facilitation clearly showed the positive impact of this approach on the educational process. The experimental results confirmed the effectiveness of pedagogical facilitation in enhancing students' professional competencies.

The analyses conducted throughout the research indicated that the method of pedagogical facilitation plays a significant role in the development of students' professional competencies. This approach proved to be a vital tool for activating students' personal and professional growth. Moreover, pedagogical facilitation strengthened students' abilities for collaborative work and provided an opportunity to develop the personal and professional competencies necessary for success in their future careers.

Throughout the study, the application of pedagogical facilitation in the higher education system was scientifically substantiated. Its importance in improving the quality of education was highlighted, and the practical implementation of pedagogical facilitation opened new opportunities for developing students' professional competencies, thereby contributing to the overall effectiveness of the educational process.

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