INSTITUTIONAL MECHANISMS FOR SHAPING THE PROFESSIONAL CULTURE OF FUTURE TEACHERS: THE CASE OF UZBEKISTAN

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Abstract. This article analyzes the effectiveness of the institutional approach in shaping the professional culture of future teachers. Based on an experimental study conducted with 310 students from higher education institutions in Bukhara, Urgench, and Navoi, positive changes were observed in professional values, communication, and reflective skills. The findings confirm the relevance and practical significance of the institutional approach in teacher education.

Keywords: institutional approach, professional culture, teacher education, pedagogical diagnostics, experimental research, higher education, reflective competence, motivation, Uzbekistan.

INTRODUCTION

In the context of contemporary educational reforms, the professional culture of future teachers is becoming a key pillar of high-quality pedagogical education. Around the world, higher education institutions are seeking new pedagogical approaches not only to deliver theoretical knowledge but also to cultivate ethical standards, institutional awareness, and a stable professional identity among teaching staff. This need is particularly relevant for post-Soviet countries, including Uzbekistan, where a fundamental transformation of the education system necessitates innovative approaches to teacher preparation.

Uzbekistan is currently implementing large-scale reforms in its higher education system, with a key focus on improving pedagogical institutions. Recent strategic documents — including the National Development Strategy, the Concept for the Development of the Higher Education System, and several Presidential decrees and resolutions — emphasize the urgent need to train a new generation of teachers who are professionally competent, institutionally engaged, and culturally aware. As a result, the formation of professional culture among future teachers has shifted from being a supplementary concern to becoming a national priority.

Although various models of teacher professional development have been developed globally, there remains a lack of systematically tested and experimentally validated institutional mechanisms specifically tailored to pre-service teachers. This study aims to fill that gap by developing and justifying mechanisms adapted to the socio-cultural and institutional conditions of Uzbekistan. The research is grounded in experimental results from three major pedagogical higher education institutions in the country.

Thus, the findings presented in this article not only contribute to national educational reforms but may also provide valuable insights for the international academic community. The article offers a scientifically grounded analysis of how an institutional approach influences the sustainable professional development of future teachers.

LITERATURE REVIEW

Against the backdrop of global educational reforms, the professional training of teachers is increasingly being viewed not merely as the acquisition of knowledge and skills, but as the formation of professional culture. In this context, the importance of the institutional approach is growing. Professional culture is a complex system encompassing not only professional knowledge and competencies but also a teacher's personality, ethical values, attitude toward the profession, and professional identity.

Theoretical foundations of the concept of professional culture were initially put forward by scholars such as B.G. Ananyev, V.A. Slastenin, N.D. Nikandrov, and G.I. Shchukina. They linked professional culture with the teacher's ethical values, personal stance, communicative culture, and professional self-awareness[2]. For example, V.A. Slastenin interpreted the professional culture of a teacher as "a unity of cultural and moral values reflected in pedagogical activity." E.V. Bondarevskaya emphasized professional culture as a fundamental condition for personal and professional development, highlighting professional ethics, a sense of belonging to the profession, and readiness for lifelong self-improvement as key components.

The institutional approach, developed in sociology by P. Berger and T. Luckmann, considers institutions as carriers of social order and values within society[1, 567-582 pp]. In the field of education, this approach allows us to view educational institutions as social entities contributing to personality development, professional orientation, and socialization.

Yu.A. Blinov described the institutional approach as a strategic basis for professional training, identifying educational institutions as key mediators in forming professional values and pedagogical ethics. A.M. Ostrovskaya emphasized the importance of aligning the university environment with cultural and economic factors to ensure the professional development of future teachers.

On the international level, the "pedagogical content knowledge" concept proposed by L.S. Shulman plays a significant role in shaping professional culture[7, 57 p]. According to him, professional culture encompasses not only knowledge and skills but also professional beliefs, ethical standards, and cultural contexts. The "communities of practice" theory by Etienne Wenger and Jean Lave highlights collaborative learning and experience sharing within professional communities as mechanisms for developing professional culture.

P. Sahlberg, using the Finnish education system as an example, demonstrated the effectiveness of combining institutional and cultural approaches in teacher training[8, 243-251 pp]. In this system, educational institutions play a leading role in forming the values and professional culture of the teaching profession.

Although the issue remains underexplored in Uzbekistan, some studies do exist. M. Umarov analyzed the impact of the pedagogical environment on professional culture. S. Qodirov examined how the sociocultural components of higher education institutions influence teacher personality. However, these studies fall short of offering an in-depth, experimental analysis of the effectiveness of institutional mechanisms.

The reviewed literature suggests that the institutional approach plays a crucial role in developing the professional culture of future teachers. However, in Uzbekistan, experimental research on this approach is scarce, and existing studies tend to focus on theoretical aspects. This article seeks to address that gap by developing and empirically testing inter-institutional mechanisms for shaping professional culture, thereby providing both theoretical insight and practical solutions.

METHODOLOGY

This study aims to develop and experimentally test a mechanism for shaping the professional culture of future teachers based on an institutional approach. A mixed-method research design was employed, combining both qualitative and quantitative data collection and analysis techniques.

The research was conducted at three higher education institutions in Uzbekistan: Bukhara State Pedagogical Institute, Urgench State Pedagogical Institute, and Navoi State University. A total of 310 students majoring in Pedagogy participated in the study. Participants were randomly assigned to an experimental group (n_1 =160) and a control group (n_2 =150).

In the experimental group, an educational process was organized based on a specially designed model aimed at developing professional culture through the integration of institutional cultural, social, and professional environments. The control group continued with traditional educational practices.

The following diagnostic tools were used:

- a custom-designed "professional culture assessment questionnaire for future teachers", developed by the author, focusing on components such as professional values, communicative culture, motivation, and reflection;
 - diagnostic tests based on the likert scale;
 - semi-structured interviews;
 - pedagogical observation checklists.

Data were collected through questionnaires, interviews, observations, and post-intervention testing. Quantitative data were analyzed using descriptive statistics (mean, variance) and independent samples t-tests to identify significant differences between groups. Qualitative data were processed using thematic analysis with contextual coding, which led to pedagogical interpretations and conclusions.

RESULTS

The experimental research was conducted among 310 students from the above-mentioned universities. Students were divided into experimental (n_1 =160) and control (n_2 =150) groups.

Both pre- and post-experiment assessments focused on four core components of professional culture: professional values, communicative culture, motivation, and reflection. Evaluations were conducted using a 5-point Likert scale to measure the degree of change in each domain.

Components	Control	Control (final)	Experimental	Experimental
	(initial)		(initial)	(final)
Professional values	3.1	3.2	3.0	4.2
Communicative culture	3.2	3.3	3.1	4.3
Motivation	3.0	3.1	3.0	4.1
Reflection	3.1	3.2	3.0	4.2

Table 1. Results of the experimental study on developing the professional culture of future teachers based on the institutional approach.

As can be seen from the table, the final results of the experimental group participants significantly improved in all components, especially in communicative culture (+1.2), professional values (+1.2), and reflection (+1.2).

To determine the statistical significance of the results, the Student's t-test method was applied. The formula for the t-test is as follows:

$$t = \frac{\bar{X}_1 - \bar{X}_2}{\sqrt{\frac{s_1^2}{n_1} + \frac{s_2^2}{n_2}}}$$

In this formula:

 \bar{X}_1, \bar{X}_2 — the mean scores of the experimental and control groups,

 s_1^2 , s_2^2 – dispersions,

 n_1 , n_2 – the number of participants in each group.

Based on the calculation results:

Professional values: t(308) = 5.64, p < 0.01Communicative culture: t(308) = 6.01, p < 0.01

Motivation: t(308) = 4.88, p < 0.01 *Reflection:* t(308) = 5.43, p < 0.01

These results indicate a statistically significant difference between the experimental and control groups (p < 0.01).

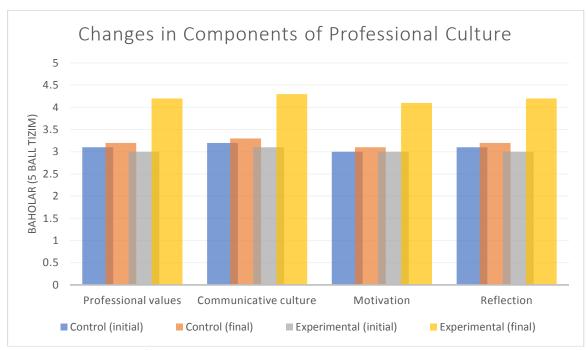


Chart 1. Changes in Components of Professional Culture

As illustrated in the chart, the experimental group showed a significant increase across all indicators, while the control group's values remained nearly static.

The results provide practical evidence of the effectiveness of the educational model developed based on the institutional approach. Due to the experimental intervention, participants' professional culture indicators improved significantly.

DISCUSSION

The results of this study confirm the effectiveness of the pedagogical model developed based on the institutional approach for shaping the professional culture of future teachers. A significant increase was observed in the experimental group across key indicators—professional values, communicative culture, intrinsic motivation, and reflective self-assessment skills. The analysis demonstrates that these changes reflect the decisive role of the institutional environment in understanding and preparing for the complex social and ethical nature of the teaching profession.

Furthermore, the study's outcomes are consistent with findings from international research. For instance:

In The Reflective Practitioner, Donald Schön emphasizes that professional development is rooted in deep reflection on one's practice[2, 41 p]. This supports the observed growth in the experimental group's reflection scores.

Albert Bandura's Social Learning Theory highlights how learning environments and experiences directly influence personal behavior and skills[1, 82-86 pp]. This underpins the formation of professional values observed in the experimental group.

Michael Fullan identifies institutional stability, collaboration, and culture as key to educational transformation[7, 17-20 pp]. These insights align closely with the methodology applied in this research.

The study also aligns with national policy documents in Uzbekistan, particularly the 2022–2026 Strategy for the Development of the Higher Education System and the National Indicators of Education Quality, confirming the relevance and practical orientation of the institutional approach in the national context.

However, certain limitations of the study should be acknowledged:

- The experiment was conducted in only three higher education institutions, limiting generalizability.
- The experiment was carried out over a single academic year, preventing long-term monitoring.
- The measurement tools primarily relied on questionnaires and evaluation tests, which may not fully capture deeper behavioral competencies.

Future research should test this model across different regions, cultural contexts, and professional fields, and investigate the distinct effects of specific institutional components through multi-stage, longitudinal studies.

CONCLUSION

The findings of this study demonstrate that the educational model developed on the basis of an institutional approach is an effective tool for shaping the professional culture of future teachers. Experimental trials revealed statistically significant improvements in professional values, communicative culture, motivation, and reflection.

The methodological framework developed within the study enables a new understanding of professional education content. Particularly, the integration of institutional resources, cultural environment, and organizational-cultural practices of the educational institution emerged as a key factor in fostering professional culture.

Scientifically, the study provides a modern and systematic approach to the concept of professional culture and establishes its theoretical integration into teacher training processes.

Practically, the model can be applied to enrich pedagogical university curricula, update training sessions focused on developing professional competencies, and design reflective seminars and workshops.

Future research should explore the implementation of this model in other specialties and regional contexts, further examine the interaction of institutional components, and investigate the development of professional culture within digital education environments.

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