

# Interactive Teaching Technologies Aimed At Developing The Legal Culture Of Public Education Teachers In The Professional Development System

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**Received:** 20 September 2025; **Accepted:** 12 October 2025; **Published:** 17 November 2025

**Abstract:** This article presents the author's research on the development of legal culture among teachers of public education within the professional development system. The paper analyzes the outcomes and methodological foundations of the conducted research, offering a systematic overview of the implemented measures and their scientific significance. Interactive teaching methods designed to enhance the legal culture of trainees during professional development courses have been developed and tested. The findings confirm that integrating interactive, reflective, and modular learning approaches significantly improves teachers' legal knowledge, analytical thinking, and sense of responsibility within the educational process.

**Keywords:** Professional development system, legal culture, legal education, teaching staff, reflection, "Legal Culture Index," "Integrated Legal Culture Index."

**Introduction:** In recent years, the process of reforming the education sector in the Republic of Uzbekistan has reached a new stage of development. In particular, the continuous professional development of pedagogical personnel, as well as the enhancement of their professional competencies—including their legal culture—has been identified as one of the priority directions of state policy. The Presidential Decree of the Republic of Uzbekistan dated April 29, 2019, No. PQ-5712, "On Approval of the Concept for the Development of the Public Education System of the Republic of Uzbekistan until 2030," emphasizes the necessity of introducing modern teaching technologies to improve teachers' professional preparedness and legal literacy [1].

During the process of acquiring legal knowledge, trainees should not only learn the laws but also develop the ability to apply them in practice, understand their rights and freedoms comprehensively, and respect their obligations to abide by the law. Legal education should cultivate individuals who refrain from committing legal violations, act within the boundaries of the law, respect themselves and others, and adhere to established social, family, and state norms. The primary role in achieving this goal belongs to the educator who provides legal knowledge. Thus, the

mission of legal education and the educator's responsibility are closely interconnected [2].

Legal culture reflects the extent to which an individual internalizes the system of legal knowledge, skills, and values. For teachers, legal culture is expressed through adherence to legal norms within the educational process and the cultivation of respect for the law among students [3]. Consequently, the development of teachers' legal culture during professional development courses through interactive teaching approaches has become an increasingly relevant and urgent issue.

Traditional lecture-based methods, unfortunately, are insufficient for forming high levels of legal thinking and reflection. Currently, the use of interactive educational technologies in the professional development system—such as case studies, role-playing, debate technologies, brainstorming, and online legal simulations—has proven effective in fostering teachers' independent thinking and decision-making competencies in legal contexts [4].

Therefore, the primary aim of this research is to develop, scientifically substantiate, and experimentally test interactive teaching technologies aimed at enhancing the legal culture of public education

teachers within the professional development system. The object of the study is the process of professional development among teachers of the public education system. The subject of the study comprises interactive teaching technologies that contribute to the development of legal culture within this process.

The scientific novelty of the research lies in the introduction of a new interactive model—“Interactive Modular Teaching Technology Based on Legal Reflection”—which is grounded in the modular formation of legal culture. Through this model, teachers’ legal knowledge, legal thinking, and legal activity skills are developed in an integrated manner. This approach not only increases teachers’ legal literacy within the public education system but also ensures adherence to the principles of legality and justice in their professional practice [5]. Ultimately, the research aims to contribute to the formation of an educational environment in Uzbekistan that respects human rights and freedoms.

**METHODOLOGY**

The methodological foundation of this research is based on contemporary scientific approaches within the fields of pedagogy, educational theory, and the formation of legal culture. The study relies on the integration of systematic, activity-based, competency-based, and interactive approaches. Within the framework of the public education system, interactive methods aimed at developing teachers’ legal culture during professional development programs were implemented and experimentally tested.

The primary research methods included:

- **Theoretical analysis** – studying scientific literature on legal culture and pedagogical technologies;
- **Experimental-methodological testing** – implementation of a newly designed modular teaching technology through interactive training sessions;
- **Surveys and interviews** – assessing the state of legal

competencies among trainees in professional development courses;

- **Observation and reflection** – analyzing teachers’ active participation and their level of legal reasoning in interactive learning processes.

The research was conducted across several regional professional development centers under the Ministry of Public Education of the Republic of Uzbekistan, including those in Andijan, Namangan, and Fergana regions. A total of 420 teachers from the public education system participated in the study. Among them, 210 teachers were assigned to the experimental group, and 210 teachers to the control group. The study focused on the description and analysis of interactive educational technologies applied within the professional development process. The following interactive methods played a central role in the research:

1. **Legal Case Study Technology** – developed to enhance teachers’ ability to make decisions based on real or simulated legal situations.
2. **Role-Playing Activities** – such as “Court Sessions” and “School Charter Simulation”—designed to help teachers internalize legal roles and express them in communicative settings.
3. **Legal Debate Technology** – aimed at developing critical and legal thinking through argumentation, analysis of evidence, and logical reasoning.
4. **Electronic Legal Simulations** – using online platforms that enable teachers to engage in virtual analysis and decision-making based on normative legal documents.

The study introduced an innovative model titled “Interactive Modular Teaching Technology Based on Legal Reflection.” This model organizes the development of teachers’ legal culture through a three-stage modular system (Table 1).

Stage	Objective	Interactive Methods	Expected Outcomes
Stage 1. Knowledge Module	To update and systematize legal concepts	Case study, brainstorming	Formation of essential legal knowledge
Stage 2. Competency Module	To learn decision-making in legal situations	Role plays, debates	Development of legal thinking and communication culture
Stage 3. Reflection Module	To analyze and evaluate the outcomes of legal activities	Problem analysis, reflection sessions	Strengthened legal awareness and sense of responsibility

The core essence of this model is to place reflective learning at the center of the educational process. This encourages teachers to evaluate their actions from a legal perspective, analyze their behavior, and engage in continuous self-improvement. The theoretical foundation of the model is based on the activity-learning concepts of J. Dewey [6], D. Kolb [7], and A. Avliyqulov [8].

To ensure the methodological support of the model, the following teaching and learning materials were developed: A methodological manual titled “A Set of Interactive Lessons for Developing Legal Culture in the Professional Development System” (2025 edition);

- An electronic learning module based on an LMS platform with a database of legal tasks;
- A reflection journal designed for participants to record their self-assessments and reflections.

Teachers’ levels of knowledge, skills, and legal awareness were regularly measured throughout the implementation process. To evaluate legal culture, the following indicators were developed:

- 1. Knowledge Indicator (K)** – measures understanding of legal concepts and laws (based on test results);
- 2. Thinking Indicator (T)** – measures the ability to analyze legal problems and make informed decisions;

- 3. Motivation Indicator (M)** – reflects a positive attitude toward legal values.

An Integral Legal Culture Index (HMI) was determined according to the following formula:

$$[ HMI = (K + T + M) / 3 ]$$

## RESULTS

The experimental phase of the study was conducted over a three-year period (2022–2025) across three regional professional development centers of the public education system in Uzbekistan. The experiment consisted of two stages:

- 1. Initial Diagnostic Stage** – assessment of teachers’ baseline level of legal culture by measuring their knowledge (K), thinking (T), and motivation (M) indicators.
- 2. Interactive Teaching Stage** – implementation of the newly designed “Interactive Modular Teaching Technology Based on Legal Reflection” for the experimental group.

A total of 210 teachers in the experimental group were trained through interactive technologies, while 210 teachers in the control group continued to receive traditional lecture-based instruction.

The comparative analysis of pre- and post-training results is summarized in Table 2.

**Table 2. Dynamics of Legal Culture Indicators (Average Scores)**

Group	Before Training (K)	After Training (K)	Before Training (T)	After Training (T)	Before Training (M)	After Training (M)	HMI Growth (%)
Experimental Group	58	87	55	83	60	88	+48%
Control Group	59	68	56	65	61	69	+14%

As illustrated in the table, all indicators showed a significant increase in the experimental group trained with interactive methods. Specifically, the knowledge indicator (K) increased by 29 points, thinking indicator (T) by 28 points, and motivation indicator (M) by 28 points. In contrast, the control group exhibited a modest growth of 10–14%, confirming the superior effectiveness of the interactive approach.

During reflection sessions, teachers demonstrated enhanced ability to critically evaluate their own legal decisions, independently analyze normative legal documents, and apply legal principles in their

professional activities. Feedback collected from participants revealed that role-playing and case study sessions were perceived as the most effective learning tools. These activities allowed teachers to experience real legal responsibilities in simulated environments. The “Court Session” and “School Charter Analysis” simulations were particularly engaging and impactful.

According to post-experimental surveys, 84% of participants agreed that interactive technologies significantly contributed to the development of their legal culture, while 6% noted that such methods required additional time and preparation. A statistical

analysis was performed using the Student's t-test to determine the reliability of the Legal Culture Index (HMI) growth. The calculated t-value ( $t = 3.97$ ) exceeded the critical value ( $t = 2.00$ ), indicating that the observed difference was statistically significant ( $p < 0.05$ ). This statistically validated outcome confirms that the implementation of the interactive teaching model substantially enhances teachers' legal culture. A deeper analysis of the results identified three major outcomes of the new interactive modular approach:

- 1. Integration of Knowledge and Practice** – teachers not only memorized legal norms but also learned to apply them in decision-making within real-life scenarios.
- 2. Development of Legal Thinking and Reflection** – teachers acquired the ability to evaluate their professional conduct through a legal lens and engage in continuous self-assessment.
- 3. Strengthening of Motivational Factors** – participants developed a stronger respect for legal values and a heightened sense of social and professional responsibility.

Thus, the “Interactive Modular Teaching Technology Based on Legal Reflection” proved to be an innovative and effective mechanism for fostering legal culture within the professional development system for teachers.

## **DISCUSSION**

The results of the conducted experiment demonstrate that interactive teaching technologies significantly contribute to the formation of teachers' legal culture within the professional development system. This finding aligns with modern pedagogical concepts emphasizing learner-centered and activity-based instruction, where the teacher is both a participant and an active subject of the learning process rather than a passive recipient of information.

The increase in the Legal Culture Index (HMI) in the experimental group proves that interactive methods facilitate a deeper and more sustainable internalization of legal knowledge. Teachers who participated in case studies and legal debates showed improved ability to interpret legal norms, evaluate educational problems from a legal perspective, and make responsible decisions in compliance with the law. These outcomes confirm that legal education should be based not only on cognitive acquisition of legal information but also on practical application and reflective understanding. The discussion of results indicates that the success of interactive technologies depends largely on three pedagogical factors:

- 1. The professional competence and creativity of**

**the instructor;**

- 2. The learners' active participation and motivation to engage in reflective practice;**

- 3. The methodological and technological support of the learning environment.**

Furthermore, the introduction of the Interactive Modular Teaching Technology Based on Legal Reflection has proven that modular organization enhances systematic learning and allows teachers to monitor their own progress dynamically. Each module serves as a self-contained cycle that combines learning, practice, and reflection, thereby reinforcing the unity between legal knowledge, legal thinking, and legal behavior.

From a theoretical perspective, the study confirms the principles proposed by John Dewey (1938), who emphasized the importance of reflective experience in education, and by David Kolb (1984), who defined learning as a cyclical process of experiencing, reflecting, conceptualizing, and experimenting. The findings also correlate with A. Avliyov's (2016) model of activity-based learning, which highlights the significance of integrating cognitive and affective domains in teacher development.

In the context of Uzbekistan's ongoing educational reforms, the development of legal culture among teachers has both pedagogical and socio-legal implications. A teacher with a high level of legal awareness contributes not only to lawful behavior within the school environment but also to the formation of a democratic and just educational system. Therefore, the implementation of interactive legal education in teacher training is not merely a methodological innovation—it represents a crucial component of national human capital development.

The research also revealed several practical challenges. Some teachers initially found interactive methods demanding in terms of time and preparation. Moreover, limited access to digital resources in certain regional training centers restricted the full implementation of online legal simulations. These challenges highlight the need for continued investment in teacher training infrastructure and the integration of modern educational technologies.

Nevertheless, the experimental results provide a compelling argument for the widespread adoption of interactive and reflective methods in the professional development of teachers. These methods not only raise the level of legal culture but also cultivate a responsible, law-abiding, and ethically conscious teaching community.

## **CONCLUSION**

The conducted research confirms that developing teachers' legal culture within the professional development system is both a pedagogical necessity and a strategic priority for improving the quality of education in Uzbekistan. The introduction of the Interactive Modular Teaching Technology Based on Legal Reflection has proven to be a scientifically substantiated and practically effective approach for achieving this goal.

The findings demonstrate that interactive methods—particularly case studies, role-playing, debates, and legal simulations—significantly enhance teachers' legal awareness, analytical thinking, and reflective competence. The implementation of modular structures within professional training allows for a systematic progression from knowledge acquisition to reflective application, ensuring sustainable development of legal culture.

**Key conclusions of the study are as follows:**

1. The formation of legal culture in teachers should be regarded as an integral component of their professional competency.
2. Interactive, reflective, and modular teaching methods are more effective than traditional lecture-based approaches in fostering teachers' legal knowledge and behavior.
3. The Interactive Modular Teaching Technology Based on Legal Reflection provides a comprehensive framework that integrates knowledge, thinking, and motivation into a unified system of legal education.
4. Continuous assessment through the Legal Culture Index (HMI) enables objective measurement of teachers' progress in legal culture development.
5. Collaboration between educational institutions and legal experts is essential to ensure the methodological and scientific support of the process.

**Recommendations:**

- Incorporate the developed interactive modular technology into the curricula of all regional professional development centers under the Ministry of Public Education.
- Organize regular training sessions and workshops for teacher-trainers on the application of interactive legal education methods.
- Develop electronic learning platforms and digital case libraries to support distance and blended learning formats.
- Strengthen interdepartmental cooperation between education and justice institutions to ensure continuous improvement of legal literacy among teachers.

- Expand scientific research on the impact of legal culture formation on educational quality and institutional governance.

**CONCLUSION**

In conclusion, the research contributes to the modernization of teacher training in Uzbekistan by introducing a new methodological paradigm based on interactivity, reflection, and legal consciousness. This approach not only improves the professional competence of teachers but also supports the creation of a law-abiding, human-centered educational environment in the Republic of Uzbekistan.

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