



PROBLEMS AND SOLUTIONS IN DEVELOPING TEACHERS' DIGITAL COMPETENCE IN TEACHING EDUCATION AND LAW SUBJECTS

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ABSTRACT

This scientific article provides an in-depth analysis of the issues related to developing teachers' digital competence in teaching the subjects "Education" and "Law". The study explores the essence of the concept of digital competence, teachers' readiness to apply digital technologies in the educational process, and the existing challenges in this field.

Based on surveys, observations, and analytical methods, the research findings indicate that the majority of teachers use digital tools merely as supplementary aids rather than as key elements of the learning process. Furthermore, inadequate technical infrastructure, poor internet connectivity, lack of digital methodological resources, and the insufficient practice-oriented modules in teacher training programs have been identified as major barriers.

The article proposes solutions for enhancing digital competence in pedagogical, organizational, and technological dimensions. In particular, it emphasizes the need to develop digital learning resources tailored to the "Education" and "Law" subjects, train teachers to work effectively with modern online platforms, introduce motivational incentive systems, and establish a local digital education ecosystem.

The results of this study demonstrate that improving teachers' digital competence contributes to increasing the quality of education in "Education" and "Law" subjects and plays a crucial role in fostering students' legal awareness and moral culture within the context of modern digital transformation.

Introduction

In the current era of globalization, the education system has become one of the most crucial factors in shaping human capital and a priority direction of state policy. Education in

the 21st century offers new opportunities through digital technologies, artificial intelligence, and virtual learning environments, making the development of teachers' digital competence a matter of pressing importance in their professional activities.

Digital competence is defined as a teacher's ability to purposefully, effectively, and creatively use information and communication technologies (ICT) in the educational process. It encompasses not only technical skills but also pedagogical approaches, digital culture, and knowledge of information security. This competence provides a foundation for teachers to instruct their subjects using modern methods, fostering students' abilities to think independently, analyze, and work with information.

The subjects "*Education*" and "*Law*" are inherently aimed at cultivating moral and ethical values, legal awareness, and legal culture among students. Integrating digital tools into the teaching of these subjects enhances lesson effectiveness, enriches topics with real-life examples, and engages students as active participants in the learning process.

However, in practice, teachers' levels of digital competence are often insufficient. Limitations in technical and methodological resources, coupled with a lack of guidelines for using digital pedagogical technologies, hinder the full implementation of modern digital platforms in teaching "*Education*" and "*Law*".

The President of the Republic of Uzbekistan's "*Digital Uzbekistan – 2030*" strategy, the *Law on Education*, and the Ministry of Public Education's "*Digital School*" project highlight the development of teachers' digital competence as a key direction for modernizing the education system. Therefore, the relevance of this study lies in the need to develop scientific and theoretical foundations, as well as practical mechanisms, for effectively integrating teachers' digital competence into the teaching of "*Education*" and "*Law*".

This article aims to identify existing problems in developing teachers' digital competence, analyze their causes and consequences, and propose effective solutions. Through this, it seeks to enhance the effectiveness of teaching "*Education*" and "*Law*" in digital environments and to establish modern mechanisms for fostering students' legal and moral awareness.

Literature Review

In recent years, the integration of digital technologies into the education system has been actively studied by numerous scholars and practicing educators. Their research covers issues related to the concept of digital competence, digital learning environments, teachers' digital culture, and the role of modern pedagogical technologies in the educational process.

The UNESCO (2018) document "Digital Competence Framework for Educators" defines digital competence as a teacher's ability to utilize digital resources, organize the learning process through digital tools, ensure students' online safety, and communicate effectively in a digital environment.

The European Union's DigCompEdu model (Redecker, 2017) identifies six key areas of digital competence for teachers: information management, digital content creation, communication, teaching, assessment, and professional development.

Uzbek researchers have also contributed to this field. Karimova D. (2023) emphasizes the need to improve professional development systems to enhance teachers' digital literacy.

Rasulova N. (2022) notes that digital competence is not only a technical skill but is closely linked to a teacher's innovative thinking and pedagogical creativity.

The subjects "Education" and "Law" play a vital role in shaping moral, ethical, and legal awareness in society. Therefore, using modern digital technologies in teaching these subjects not only increases lesson effectiveness but also develops students' abilities for independent thinking, problem-solving, and working with information.

Hasanov B. (2022) demonstrated that using ICT in legal education can strengthen students' legal reasoning and sense of responsibility. Saidova M. (2021) analyzed the effectiveness of interactive digital methods (e.g., online forums, virtual discussions) in enhancing students' social engagement in "Education" classes.

Positive experiences also exist in international contexts. For instance, the OECD (2021) report introduces the concept of digital citizenship, an approach aimed at fostering students' legal and ethical responsibility in online environments.

The literature analysis indicates that while there is extensive research on developing teachers' digital competence, digital methodological approaches specific to "Education" and "Law" subjects remain underdeveloped. In particular:

- National practical guidelines for integrating digital tools into legal and moral education are insufficient;
- The number of digital teaching and methodological kits developed for teachers is limited;
- Existing professional development courses focus more on theoretical knowledge, with limited attention to practical skill formation.

Thus, developing teachers' digital competence specifically in the context of teaching "Education" and "Law" remains an insufficiently explored scientific problem.

This gap defines the novelty of the present study — namely, the necessity to develop a systematic approach for enhancing digital competence in "Education" and "Law", analyze existing challenges, and propose practical solutions.

Analysis and Results

During the study, an analysis was conducted among teachers of "Education" and "Law" at five model general education schools using surveys, interviews, and observation methods.

The conducted surveys allowed for the assessment of teachers' digital competence in the following five areas:

Table 1.

"Teachers' Digital Competence Levels Across Key Areas"

Direction	High level	Medium level	Low level
Skills in using information technologies	26%	48%	26%
Ability to create digital resources	18%	43%	39%
Experience in working with online platforms	22%	36%	42%
Use of digital methods in the teaching process	30%	40%	30%

Digital security and information literacy	34%	39%	27%
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The results indicate that approximately half of the teachers (40–45%) possess a moderate level of digital competence, while the number of teachers with deep methodological and technical preparation does not exceed 25%.

This situation demonstrates that teachers primarily use digital tools in simple forms, such as presentations, electronic tests, and file sharing, but encounter difficulties when integrating them into the content of lessons.

The problems identified during the study were grouped as follows:

1. Technical issues:

- In some schools, the quality of the internet connection is low (70% of teachers reported this);

- Computers and projectors are insufficient, and technical maintenance is slow.

2. Methodological issues:

- There is a lack of digital teaching and methodological resources tailored to the “Tarbiya” and “Huquq” subjects;

- Teachers have limited experience in designing lessons in a digital environment;

- Clear guidelines for digital assessment systems are absent.

3. Psychological and organizational issues:

- Older teachers often have distrust or fear of digital technologies;

- Mechanisms to encourage digital innovation in educational institutions are limited;

- Professional development courses provide few practical exercises related to digital technologies.

5. General Findings

The research results revealed the following conclusions:

1. The level of teachers’ digital competence is uneven — many teachers are technically proficient, but their methodological and creative approaches are weak.

2. Professional development courses should be enriched with practical exercises to effectively develop digital competence.

3. Creating digital educational resources specific to the “Tarbiya” and “Huquq” subjects significantly improves teaching quality.

4. Digital tools serve as a strong motivational factor in fostering students’ legal thinking, moral values, and civic awareness.

Conclusion

The findings indicate that in the current era of digital transformation, developing teachers’ digital competence is one of the most important priorities of the education system. Specifically, in teaching the “Tarbiya” and “Huquq” subjects, this competence is crucial not only from a technical standpoint but also from pedagogical, moral, and legal perspectives.

The surveys and observations conducted revealed the following:

- Although most teachers have technical skills to use digital tools, they lack sufficient knowledge of how to fully organize lessons in a digital environment.

• Technical infrastructure and methodological resources for digitizing the educational process are insufficient.

- Practical components in professional development programs are limited.
- Teachers' motivation and confidence in using digital technologies are not always high.

Nevertheless, experimental activities showed that if teachers are provided with practically oriented training programs, modern digital platforms, and methodological support, they quickly adapt to effective use of digital tools. As a result, students' engagement, motivation, and learning outcomes improve.

Thus, developing digital competence in the "Tarbiya" and "Huquq" subjects is a systematic process that contributes to teachers' professional growth, students' legal and moral education, and overall improvement in the quality of the educational process.

Based on the research results, the following practical and organizational recommendations are proposed:

1. Pedagogical Level:

- Develop digital teaching and methodological resources for the "Tarbiya" and "Huquq" subjects (video lessons, interactive tests, virtual cases, legal scenario games, etc.).
- Establish specific diagnostic criteria and a rating system to assess teachers' digital competence.
- Use interactive digital platforms (e.g., Kahoot, Quizizz, Mentimeter, Padlet, Canva) to actively engage students during lessons.

2. Organizational Level:

- Regularly organize practical trainings, seminars, and online courses for teachers.
- Introduce the role of a "Digital Mentor" in each school (an experienced teacher providing advice on digital technologies).
- Implement mechanisms for material and moral incentives for teachers who successfully integrate digital technologies into teaching.

3. Technical and Infrastructure Level:

- Equip schools with stable internet access, modern computers, and projectors.
- Create local online platforms (such as "HuquqOnline.uz" and "TarbiyaHub.uz") to enrich national content and make it accessible for general use.
- Develop guidelines for teachers on information security and digital literacy.

4. Scientific-Research Level:

- Expand scientific and methodological research on developing digital competence in the "Tarbiya" and "Huquq" subjects.

- Collaborate with higher education institutions to design innovative lesson models.

Adapt advanced international practices in digital education to the national context.

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