

**PEDAGOGICAL FOUNDATIONS OF USING HISTORICAL AND  
CULTURAL HERITAGE IN THE TRAINING OF ENGINEERING  
PEDAGOGUES**

13.00.01 – Theory of Pedagogy. History of Pedagogical Doctrines

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**Annotation.**

This article examines the pedagogical foundations of using historical and cultural heritage in the process of training engineering pedagogues. The study explores the role of cultural heritage in education, its impact on strengthening national identity, fostering moral and ethical values, and developing professional competencies. By analyzing Uzbekistan's experience in comparison with international practices, the article highlights practical mechanisms for integrating architectural monuments, the scientific legacy of great scholars, and ancient engineering achievements into the learning process. The findings demonstrate that the effective use of historical and cultural heritage serves as a bridge between theory and practice in higher education and contributes to the formation of engineering pedagogues as specialists who combine technical knowledge with national and cultural values.

**Keywords:** engineering pedagogue, historical and cultural heritage, educational process, national identity, moral and ethical education, professional competence, international experience, teaching methodology

**Main Part**

Training engineering pedagogues today is one of the key tasks of the higher education system. An engineering pedagogue is a specialist who not only possesses technical knowledge but also applies pedagogical approaches. Such a teacher does not merely deliver subject-specific knowledge but also influences the moral and social development of students (Sharipov F., Hasanboeva O., Yo'ldoshev J., 2010, «Pedagogika»).

In the educational system of Uzbekistan, the use of historical and cultural heritage in the preparation of engineering pedagogues is considered one of the important scientific and pedagogical directions. On the one hand, this process deepens the professional preparation of teachers; on the other, it strengthens students' loyalty to national and

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universal values. According to pedagogical psychology, the integration of cultural values into the learning process is viewed as a factor that enhances students' personal development (Zimnyaya I.A., 2002, «Pedagogicheskaya psikhologiya»).

In 2019, the President of the Republic of Uzbekistan emphasized the importance of widely incorporating historical and cultural heritage into the educational process within the framework of the "Concept for the Development of National Spirituality and Ideology." This policy document also serves as a methodological basis for training engineering pedagogues (Decree of the President of the Republic of Uzbekistan, 2019). Central Asia, particularly Uzbekistan, is rich in historical and cultural heritage. Architectural monuments, written sources, and the scientific legacy of great scholars are not only historical values but also valuable modern educational resources. For example, the ancient architectural monuments of Khiva, Bukhara, and Samarkand can be used as visual tools in teaching the history of engineering and technology. Avloni, in his work «Turkiy Guliston yoki Axloq» (1913), emphasized that national heritage plays a vital role in the moral education of youth.

The first fundamental reason for utilizing historical and cultural heritage in the training of engineering pedagogues is ««the formation of national identity»». National identity is the recognition of oneself as a member of a community through shared history, culture, language, and traditions. When students become familiar with their nation's history, culture, and scientific achievements, their professional responsibility increases, and their sense of belonging is reinforced.

The second reason is ««moral and ethical education»». An engineering pedagogue should not only teach technical knowledge but also instill values such as honesty, responsibility, discipline, and patriotism. I.A. Karimov, in his book «High Spirituality – an Invincible Force» (2008), stated that applying national heritage in education is one of the main factors in shaping well-rounded individuals.

The third reason is ««the development of professional competencies»». Engineering education requires both theoretical knowledge and practical skills. The use of historical monuments, ancient engineering achievements, and the scientific works of great scholars in teaching helps students master technical sciences more effectively. For instance, ancient water systems, architectural monuments, and Ulugbek's observatory serve as real examples of the historical development of engineering. Integrating these resources into education fosters engineering thinking among students (Zimnyaya I.A., 2002, «Pedagogicheskaya psikhologiya»).

Theoretical sources in pedagogy emphasize that the integration of theory and practice is crucial for effective learning (Sharipov F., Hasanboeva O., Yo'ldoshev J., 2010, «Pedagogika»). For engineering pedagogues, such integration is particularly important since they must not only transfer technical knowledge but also contribute to students'

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moral and ethical development. Therefore, the use of historical and cultural heritage in engineering education supports the development of social responsibility, national identity, and civic awareness among students.

International experiences confirm this approach. For example, IGIP (International Society for Engineering Pedagogy) emphasizes in its publications that modern engineering pedagogues should possess not only professional competencies but also communication, cultural, and social skills (IGIP, 2020, «Engineering Pedagogy – International Perspectives»). In European countries, the inclusion of soft skills and cultural competencies in engineering education ensures not only professional but also personal development of students.

I.A. Karimov also stressed in his book «High Spirituality – an Invincible Force» (2008) that preserving and applying national heritage in education is the foundation of state development. This idea is relevant to the preparation of engineering pedagogues as well, since they are not only knowledge transmitters but also mentors shaping students' worldview.

### Conclusion

The use of historical and cultural heritage in the training of engineering pedagogues integrates the theoretical and practical aspects of education. This process strengthens students' national identity, promotes moral and ethical qualities, and deepens professional competencies. Engineering pedagogues should not limit themselves to technical knowledge but must also build pedagogical perspectives rooted in cultural traditions. If teachers themselves value national heritage, they will be able to apply it in education, thereby fostering patriotism, historical memory, and national pride among students. Therefore, utilizing historical and cultural heritage is not just a methodological tool but an essential factor in shaping engineering pedagogues as specialists who educate based on national values.

### REFERENCES:

1. Sharipov, F., Hasanboeva, O., Yo'ldoshev, J. (2010). «Pedagogika». Tashkent: Fan va texnologiya.
2. Zimnyaya, I.A. (2002). «Pedagogicheskaya psixologiya». Moscow: Logos.
3. Decree of the President of the Republic of Uzbekistan. (2019). «Concept for the Development of National Spirituality and Ideology». Tashkent.
4. Avloni, A. (1913). «Turkiy guliston yoki axloq». Tashkent.
5. Karimov, I.A. (2008). «High Spirituality – an Invincible Force». Tashkent: Ma'naviyat.
6. IGIP. (2020). «Engineering Pedagogy – International Perspectives». International Society for Engineering Pedagogy.
7. Dewey, J. (1916). «Democracy and Education». New York: Macmillan.

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### VOLUME-5, ISSUE-9

8. UNESCO. (2015). «Rethinking Education: Towards a Global Common Good?» Paris: UNESCO Publishing.
9. Khodjayev, A. (2015). «History of Uzbekistan». Tashkent: Universitet.
10. Hasanov, B. (2021). «Integration of National Values in the Educational Process». Tashkent: Iqtisod-Moliya.
11. Broman, O., & Reckase, M. (2017). «Engineering Education and Practice». Springer.
12. UNESCO. (2003). «Convention for the Safeguarding of the Intangible Cultural Heritage». Paris: UNESCO.
13. Khutorskoy, A.V. (2005). «Pedagogika: Textbook for Universities». St. Petersburg: Piter.
14. Shonazarov, Q. (2020). «Innovative Approaches in Education». Tashkent: O'qituvchi.