

Analysis of the 4+2 System in The Professional Training of Students

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Abstract: The article analyzes experiments conducted at Namangan State Pedagogical Institute, Andijan State Pedagogical Institute, and Chirchik State Pedagogical University to implement the 4+2 system (4 days of theoretical training and 2 days of practice). The study examines the advantages and challenges of the system, demonstrating the effectiveness of the specially developed mobile application “Hamkorta’lim” and the GeoEducationbot. These multimedia tools enhance interaction between students and teachers. However, challenges such as a lack of methodological guidelines, organizational shortcomings, and the absence of a clear regulatory framework were identified. Proposed solutions explore ways to improve the system’s effectiveness.

Keywords: 4+2 system, Hamkorta’lim, GeoEducationbot, theoretical training, practice, pedagogical education, methodological guidelines, digital tools, active learning.

Introduction: Within the framework of introducing innovative approaches to Uzbekistan’s education system, the 4+2 system holds a significant place in pedagogical education. The Presidential Decree of the Republic of Uzbekistan dated February 7, 2017, No. PF-4947, “On the Strategy of Actions for the Further Development of the Republic of Uzbekistan,” Presidential Resolutions dated April 20, 2017, No. PP-2909, “On Measures for the Further Development of the Higher Education System,” dated August 30, 2019, No. PP-4433, “On Measures to Attract Youth to Scientific Activities and Support Their Initiatives,” as well as the Presidential Decree dated May 11, 2022, No. PF-134, “On the Approval of the National Program for the Development of Public Education for 2022–2026,” and the Presidential Resolution dated June 21, 2022, No. PP-289, “On Measures to Improve the Quality of Pedagogical Education and Further Develop Higher Education Institutions Training Pedagogical Personnel,” mandate the implementation of the 4+2 system for 2nd to 4th-year students in full-time programs. According to these documents, academic classes follow the 4+2 scheme, with 4 days dedicated to university-based training and 2 days to practice in preschool and general education institutions.

The 4+2 system enhances students’ competitiveness in

the labor market by combining theoretical knowledge with practical skills. Modern technologies and global changes underscore the importance of practice as an integral part of the educational process. Pedagogical practice aims to develop students’ intellectual and logical thinking in their chosen field, strengthening their professional training.

In 2024, experiments were conducted at Namangan State Pedagogical Institute (NamSPI), Andijan State Pedagogical Institute (ASPI), and Chirchik State Pedagogical University to evaluate the effectiveness of the 4+2 system. The experiments utilized specially developed digital tools—the “Hamkorta’lim” mobile application and the Telegram-based GeoEducationbot—which enhanced interaction between students and teachers. However, challenges such as a lack of methodological guidelines, organizational difficulties, improper use of practical opportunities by students, the assignment of students to non-pedagogical tasks at practice sites, and the absence of a unified regulatory framework were identified. This article analyzes the advantages, challenges, and potential solutions for the 4+2 system based on scientific evidence.

Main Body

The Essence of the 4+2 System and the Role of

“Hamkorta’lim” and GeoEducationbot

In the modern world, one of the pressing tasks of the education system is the widespread use of advanced pedagogical technologies, their integration into the educational process, and the adaptation of the experiences of developed countries to the national education system. What forms exist for applying theoretical knowledge in practice? Based on our observations, the following forms of skill development for applying knowledge in practice can be identified:

- Qualification practice, traditionally conducted for 2 weeks, 1, or 2 months at designated institutions.
- Pedagogical practice, performed by students at the end of academic courses.
- Long-term pedagogical practice (approximately 15 weeks or 4 months), aimed at preparing professional personnel and ensuring the integration of theory and practice.
- Additionally, systems such as 4+2, dual education, 3+2, and 5+1 are applied in the learning process.

The 4+2 system allows students to study theoretical knowledge for 4 days and apply it in practice for 2 days. It is based on the principles of “active learning” (Bonwell & Eison, 1991), which promote the development of cognitive and practical skills. Theoretical training includes pedagogical theories, teaching methodologies, and educational psychology, while practice focuses on applying this knowledge in schools or other educational institutions.

The “Hamkorta’lim” mobile application facilitates real-time interaction between students and teachers. Through the app, students can upload assignments, receive assessments, and manage projects. For example, students can upload lesson plans, receive immediate feedback from teachers, and track their progress. The app is adapted for various disciplines: students in primary education use it to plan mathematics and native language lessons, while those in pedagogical programs use it to develop classroom management strategies. However, the app’s effectiveness could be greater if all teachers, especially those leading practical and seminar classes, actively engaged with it. The experiment noted that the app’s potential was underutilized due to insufficient teacher involvement.

GeoEducationbot, operating on the Telegram platform, assists with tasks related to geographic location. For instance, the bot helps students locate practice sites (nearby schools) and provides relevant resources. Its primary goal is to ensure the continuity of practical training and simplify the work of practice supervisors. These tools were tested in accordance with Presidential

Resolution No. PP-289 of 2022.

However, challenges arose during practice. Students often could not fully utilize practical opportunities due to the lack of clearly defined tasks and methodologies. Additionally, at some practice sites, students were assigned non-pedagogical tasks, such as administrative work, which contradicted the system’s objectives.

METHODOLOGY

In 2024, an 8-week experiment involving 231 students was conducted at NamSPI, ASPI, and Chirchik State Pedagogical University. Each cycle consisted of 4 days of theoretical classes and 2 days of practice using “Hamkorta’lim” and GeoEducationbot. The study employed mixed methods: quantitative assessment (pre- and post-training tests to evaluate theoretical knowledge and practical skills) and qualitative data (surveys of students and teachers).

Key Findings:

- **Theoretical Knowledge:** Students in the 4+2 system demonstrated a 13.2% higher level of knowledge retention compared to traditional methods, attributed to the systematic integration of theory and practice.
- **Practical Skills:** Skills in lesson planning, classroom management, and interaction with schoolchildren improved by 25%, as confirmed by evaluations during practical sessions.
- **Motivation:** 80% of students reported increased interest and motivation in learning due to the use of digital tools. This aligns with findings in *Frontiers in Education* (2021), which suggest that digital platforms enhance problem-solving abilities. The study also compared the 4+2 system with traditional pedagogical education programs, demonstrating a significant advantage of the 4+2 system in improving student outcomes through active learning. However, the lack of methodological guidelines led to inconsistent quality of practical experiences across institutes.

Advantages of the 4+2 System

Knowledge Consolidation

Through “Hamkorta’lim,” students uploaded lesson plans in real-time and received immediate feedback from teachers. At NamSPI, this led to a 12% improvement in lesson delivery quality, as teachers could correct errors before classes began. GeoEducationbot simplified the identification of practice sites, increasing student engagement and reducing logistical challenges.

Flexibility

Digital tools were adapted to various disciplines. For example, primary education students used “Hamkorta’lim” to plan mathematics and native

language lessons, while pedagogical students used it to develop classroom management strategies. GeoEducationbot supported interdisciplinary tasks, such as integrating geography and environmental education, fostering creative teaching methods.

Collaboration

The tools created an environment for collaborative learning, enabling students to share resources, discuss challenges, and work on joint projects. This aligns with the “4C” model (critical thinking, creativity, communication, collaboration) for 21st-century skills (Partnership for 21st Century Skills, 2019).

Challenges

Despite its strengths, the following challenges were identified:

1. **Lack of Methodological Guidelines:** The absence of clear instructions on which guidelines to follow, methods to use, or tasks to complete negatively impacted the quality of practice.
2. **Absence of a Unified Regulatory Framework:** Organizational and assessment criteria for the system were undefined, leading to variations in approaches across institutes.
3. **Limitations of Traditional Practice:** Practice was often limited to routine lesson delivery, restricting opportunities for innovative pedagogical approaches.
4. **Monitoring Issues:** Supervising third-year students practicing in schools in their regions, especially in remote areas, was challenging.
5. **Misuse of Students:** At some practice sites, students were assigned non-pedagogical tasks, such as filling out documentation.

Recommendations

To address these challenges, the following measures are proposed:

1. **Develop Methodological Guidelines:** Based on the “4K” model, create guidelines specifying tasks, methods, and evaluation criteria for practice. These should be tailored to various pedagogical disciplines and regularly updated.
2. **Establish a Regulatory Framework:** The Ministry of Higher Education should develop a unified regulation for the 4+2 system, defining tasks for students, teachers, and practice sites, along with clear evaluation criteria.
3. **Diversify Practice:** Introduce simulations, case studies, and interdisciplinary projects. For example, integrating mathematics and literature through story-based lessons could enhance creativity.
4. **Digital Monitoring:** Implement real-time monitoring

systems on “Hamkorta’lim” and GeoEducationbot, including tracking student achievements and generating automated reports.

5. **Mobile Lessons:** Encourage teachers to conduct “mobile lessons” at practice sites, combining theory and practice in real-world settings. This approach was tested during the experiment and proved highly effective.

6. **Training for Practice Supervisors:** Organize training for practice site supervisors to ensure they understand the goals of the 4+2 system and effectively support students.

CONCLUSION

Experiments at NamSPI, ASPI, and Chirchik State Pedagogical University demonstrated that the 4+2 system, particularly with the use of “Hamkorta’lim” and GeoEducationbot, holds significant potential in pedagogical education. These tools enhance students’ professional skills and motivation. However, to fully realize the system’s potential, challenges such as the lack of methodological guidelines, absence of a regulatory framework, and insufficient digital integration must be addressed. The proposed solutions, including the development of comprehensive guidelines, a standardized regulatory framework, and advanced digital tools, could position the 4+2 system as a cornerstone of training modern educators in Uzbekistan’s education system.

REFERENCES

- Bonwell, C. C., & Eison, J. A. (1991). *Active Learning: Creating Excitement in the Classroom*. ASHE-ERIC Higher Education Reports.
- Partnership for 21st Century Skills. (2019). *Framework for 21st Century Learning*. <http://www.p21.org/our-work/p21-framework>
- Smith, J., & Brown, T. (2020). Active learning and cognitive development. *Journal of Educational Psychology*, 112(3), 456–467.
- Lee, H., & Kim, Y. (2021). Digital tools in education: Enhancing motivation and problem-solving skills. *Frontiers in Education*, 6, 123–134.
- Presidential Resolution of the Republic of Uzbekistan No. PP-289. (2022). On measures to improve the quality of pedagogical education. Tashkent, Uzbekistan.
- Johnson, D. W., & Johnson, R. T. (2018). Cooperative learning and technology integration in education. *Educational Technology Research and Development*, 66(4), 897–915.
- UNESCO. (2020). *Education 2030: Incheon Declaration and Framework for Action*. Paris: UNESCO.

Vygotsky, L. S. (1978). *Mind in Society: The Development of Higher Psychological Processes*. Moscow: Pedagogy.

Kolb, D. A. (1984). *Experiential Learning: Experience as the Source of Learning and Development*. Englewood Cliffs, NJ: Prentice-Hall.

Mirziyoyev, Sh. M. (2021). *Strategy for the Development of the Education System of the Republic of Uzbekistan Until 2030*. Tashkent: Administration of the President of the Republic of Uzbekistan.

Anderson, L. W., & Krathwohl, D. R. (2001). *A Taxonomy for Learning, Teaching, and Assessing: A Revision of Bloom's Taxonomy of Educational Objectives*. New York: Longman.

Mishra, P., & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for technology integration in education. *Teachers College Record*, 108(6), 1017–1054.