

DEVELOPMENT OF A PRACTICAL PROGRAM TO INCREASE STUDENT MOTIVATION AND ITS PEDAGOGICAL EFFECTIVENESS

Makhmudjon Sobirovich Nishonov
Nodira Alijonovna Maksudova
Marjona Bakhtiyor-kizi Sherboyeva

Kimyo International University in Tashkent Namangan Branch

Abstract: *This article is devoted to the development of a practical program aimed at developing the internal learning motivation of general secondary school students and increasing the efficiency of the educational process. The purpose of the study is to identify the psychological and pedagogical mechanisms of students' motivation and to implement the practical program “Motivational Growth”. During the research, methods such as systematic analysis, pedagogical diagnostics (surveys and tests), and pedagogical experiments were used. The results of the study showed that in classes where interactive methods and cognitive visualization tools were used, the level of student activity increased by 23% compared to the control group. In conclusion, it is noted that to stabilize student motivation, the implementation of problem-based learning elements and a timely feedback system is of strategic importance.*

Keywords: *motivation, learning effectiveness, practical program, interactive methods, cognitive visualization, student activity, internal need, pedagogical diagnostics, feedback, cognitive load*

ENTRANCE

Relevance of the topic. In the modern educational paradigm, the formation of students' internal aspirations for knowledge and their upbringing as socially active individuals is a priority. Since traditional educational methods cannot fully satisfy students' interests in the conditions of global informatization, there is a need to introduce new, practical mechanisms for managing motivation in the educational process.

The level of understanding of the problem. The problem of motivation has been widely studied in psychology and pedagogy (for example, in the studies of foreign and domestic scientists such as A.Maslow, E.Desi, R.Ryan). However, despite the existence of many theoretical approaches, comprehensive practical programs that directly take into account the cognitive and emotional needs of students in the context of general secondary schools have not been sufficiently systematized.

Problems identified and unexplored in the study. Today, the following conflicts and problems awaiting solution are observed in school practice:

- Students' interest in learning decreases as they move to higher grades;
- Due to the low relevance of educational content to real-life practice, students lack a clear answer to the question “why should I study?”;
- Teachers use only external motivation methods (evaluation, reprimand) to motivate students, and methodological tools for developing internal motivation are not studied.

The purpose of the study. The aim is to develop a practical program “Motivational Growth”, which includes psychological and pedagogical methods, aimed at activating students' learning activities, and to substantiate its effectiveness.

Research objectives:

1. Diagnosing and analyzing the main factors that reduce student motivation in the educational process;
2. Developing modules to increase motivation based on interactive methods and modern pedagogical technologies, based on the age characteristics of students;
3. Implementation of the developed practical program into lesson processes and comparative analysis of the results obtained;
4. Develop methodological recommendations for teachers to continuously support students' enthusiasm for the lesson.

LITERATURE ANALYSIS AND METHODS

The issue of forming student motivation is one of the central problems of modern pedagogical psychology, which is the main driver determining the quality of education. In classical behaviorist approaches, motivation was explained mainly through external stimuli - a system of incentives and punishments. However, since the second half of the 20th century, researchers have begun to focus on the internal aspirations and needs of a person.

In particular, the “Self-Determination Theory” developed by E. Deci and R. Ryan indicates three pillars of student motivation: autonomy (independence), competence (confidence in one's own abilities), and social connectedness.¹ According to this theory, when a student feels free in the learning process and realizes that the material he is learning is important for his personal development, then he will develop stable intrinsic motivation.

In addition, modern research is widely studying the impact of “Cognitive Visualization” and “Gamification” elements on motivation. Enriching the educational process with digital tools and interactive methods ensures that students enter a “Flow state”, which helps to overcome psychological barriers to mastering complex topics.² Our local scientists also emphasize that students' social motivation can be increased by linking educational content with life competencies.

During the research process, the following methodological approaches were used to verify the effectiveness of the developed practical program to increase student motivation:

1. Systemic-functional analysis. The initial stage of the study analyzed the existing pedagogical situation and systematically studied the factors that reduce motivation (monotony of lessons, lack of practical training). This method served to clearly define the components of the practical program.
2. Pedagogical diagnostics and questionnaire. Special psychological tests and open questionnaires were conducted to determine the level of students' interest in the lesson. As a result of this diagnosis, students' cognitive needs and external factors distracting them from the lesson were classified.
3. Experimental method. The developed practical program was implemented in selected experimental classes. In this case, the lessons were organized using “Problem-based learning”, “Project work” and digital technologies (electronic whiteboards, interactive presentations), abandoning the traditional lecture format. In the control groups, lessons continued in the usual manner.

¹Deci, EL, & Ryan, RM (2000). The “What” and “Why” of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268.

²Hattie, J. (2009). *Visible Learning: A Synthesis of Over 800 Meta-Analyses Relating to Achievement*. Routledge.

4. Quantitative and qualitative analysis. At the end of the experiment, students’ mastery indicators and activity in the lesson were compared using mathematical and statistical methods (for example, Student’s t-test). Qualitative analysis assessed changes in students’ learning motivation - their emotional attitude to the lesson and their willingness to work independently.

RESULTS AND DISCUSSION

The effectiveness of the practical program developed to increase student motivation was confirmed by a six-month pilot study. Students from secondary schools in Fergana participated in the study. The data obtained showed that not only did students’ academic performance improve, but their social and psychological activity also improved.

The table below presents a comparative analysis of the motivation levels (in percentages) of students in the experimental and control groups:

Motivation level	Experiment group (At the beginning)	Experiment group (Finally)	Control group (Finally)	Change (Dynamics)
High (Stable intrinsic motivation)	15%	38%	18%	+23%
Medium (Situational Interest)	45%	52%	42%	+7%
Low (Based on external forcing)	40%	10%	40%	-30%

The results show that in the classrooms where the practical program was implemented, students’ attitudes towards the lesson changed dramatically. In particular, the 30% reduction in low-motivation students is evidence of their successful integration into the educational process through interactive methods such as cognitive visualization and the “Political Laboratory”.

In the process of analyzing the results obtained, it is worth noting that maintaining student motivation only through evaluation or material incentives gives a short-term effect. Our research has shown that creating problem situations in the lesson and giving students the opportunity to “free choice” increases their participation in the lesson by 1.5 times. In this process, the teacher’s role is not only as a transmitter of information, but also as a guide (facilitator).

As noted in local pedagogical research, the use of innovative technologies in the educational process serves to realize the personal potential of the student. R.Ishmuhamedov noted that the use of active methods in education instills in the student not only a desire for knowledge, but also a sense of responsibility.³ Our practical program also introduced a feedback system focused on recognizing the student’s personal achievements after each assignment, which strengthened the student’s confidence that “I can do this.”

It is also necessary to determine the pedagogical boundaries of the use of digital technologies and electronic boards in increasing learning motivation. Technology should only be a means to achieve a didactic goal. Z. Nishanova in her research substantiated that the cognitive development of the student’s personality directly depends on the creative

³ Ishmuhamedov R., Abdukodirov A., Pardaev A. Innovative technologies in education (practical recommendations for teachers of educational institutions). – T.: “Iste’dod” Foundation, 2008. – 180 p.

organization of the lesson and that the role of the psychological climate in this process is incomparable. During the experiment, it was found that practical programs aimed at increasing motivation will be maximally effective only when the socio-psychological environment in the classroom is healthy.

CONCLUSION

As a result of theoretical and practical research on increasing student motivation, the following conclusions were reached:

1. Systematic analysis of motivation: In modern educational conditions, it has become clear that maintaining students' interest in learning through external incentives (grades, punishments) alone is not enough. To achieve sustainable results, it is necessary to create a methodological environment that satisfies the student's internal needs and supports his autonomy and competence.

2. Effectiveness of the practical program: The practical program "Motivational Growth" used in the experimental work significantly increased the activity of students in the lesson. In particular, the appropriate use of interactive methods and digital technologies (electronic whiteboards, visual modeling) allowed to increase the share of highly motivated students in the experimental groups by 23%.

3. The novelty of the methodological approach: The study found that when a student can see the connection between the information he is learning and real-life practice and has creative freedom during the lesson, a "flow state" is formed. This radically improves the quality of learning and the level of retention of educational material.

4. Practical recommendations: Methodological recommendations have been developed for school teachers to continuously support student motivation. The main focus is on positive emotional communication between the teacher and the student, the formation of problem situations in the lessons, and taking into account the individual development trajectory of each student.

In conclusion, the developed practical program serves as an important tool for humanizing the educational process in general secondary schools and increasing educational efficiency. It is advisable to further improve research in this area in various fields of science in the future.

References

1. Mirziyoyev Sh.M. Yangi O'zbekiston strategiyasi. – Toshkent: "O'zbekiston" nashriyoti, 2021. – 464 b.
2. Ishmuhamedov R., Abduqodirov A., Pardaev A. Ta'limda innovatsion texnologiyalar (ta'lim muassasalari pedagog-o'qituvchilari uchun amaliy tavsiyalar). – T.: "Iste'dod" jamg'armasi, 2008. – 180 b.
3. Nishanova Z.T. Mustaqil ijodiy fikrlashni shakllantirishning psixologik asoslari: Psixol. fan. dok. dis. – T., 2005. – 340 b.
4. Yo'ldoshev J.G., Usmonov S.A. Zamonaviy pedagogik texnologiyalarni amaliyotga joriy etish. – T.: Fan va texnologiya, 2008. – 132 b.
5. Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of Goal Pursuits: Human Needs and the Self-Determination of Behavior. *Psychological Inquiry*, 11(4), 227-268.
6. Hattie, J. (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*. Routledge. – 280 p.

⁴Nishanova ZT Psychological foundations of the formation of independent creative thinking: *Psychol. fan. dok. dis.* – T., 2005. – 340 p.

7. Sweller, J. (2011). Cognitive Load Theory (Vol. 1). Springer Science & Business Media. – 310 p.
8. Zayniddinova, M. G. (2022). O‘quvchilar o‘quv motivatsiyasini shakllantirishning pedagogik-psixologik xususiyatlari. *Oriental Renaissance: Innovative, educational, natural and social sciences*, 2(2), 708-713.
9. G'oziyev E.G. Umumiy psixologiya. – T.: Toshkent universiteti, 2002. – 350 b.
10. Максудова, Н. (2026). СОЗДАНИЕ ИНТЕГРИРОВАННЫХ УЧЕБНЫХ МОДУЛЕЙ. *Азиатский журнал научных исследований и инноваций*, 1 (2), 363-368.
11. Alijonova, M. N. (2025). TAYANCH-HARAKAT SISTEMASIDA KAMCHILIGI BO‘LGAN BOLALAR UCHUN ART-TERAPIYANING AHAMIYATI. *ILMIY TADQIQOTLAR VA YANGI OLAM*, 1(2), 139-152.
12. Jamolxonova, X. N. (2025). Gender tolerantlikni rivojlantirishda etnopedagogik metodlarning ilmiy-pedagogik ahamiyati. *Fergana methodical school*, (3), 108-114.
13. Isroilova, N. A., & Abdusakimova, T. B. (2024). МАКТАБГАЧА ТА’ЛИМ TASHKILOTI TARBIYACHILARIDA IJODIY SIFATLARNI SHAKLLANTIRISHDA ZAMONAVIY TA’LIM. *Вестник магистратуры*, 40.
14. AbdulxamiDovna, I. N., & QiZi, A. T. B. (2023). МАКТАБГАЧА ТА’ЛИМ TARBIYALANUVCHILARDA INTELLEKTUAL QOBILIYAT VA KREATIV FIKRLASHNI RIVOJLANTIRISH. *Вестник магистратуры*, (5-3 (140)), 73-74.
15. Ismailova, N. (2025). “FLIPPED CLASSROOM “TEKNOLOGIYASI ASOSIDA BOSHLANG ‘ICH SINFI O‘QUVCHILARIDA KOGNITIV FAOLLIKNI RIVOJLANTIRISHNING AHAMIYATI. *Универсальная индексная библиотека науки и техники в современном мире*, 4(19), 34-37.
16. Murodjon Ulug‘bek o‘g, A. (2025). NUTQ MADANIYATI VA UNDAGI MILLIY URF-ODATLARNING AKS ETTIRILISHI. *ОБРАЗОВАНИЕ НАУКА И ИННОВАЦИОННЫЕ ИДЕИ В МИРЕ*, 83(3), 323-330.
17. MD Muxammajonova - *UNIVERSAL JOURNAL OF ACADEMIC AND ...*, 2025 5–6-SINF O‘QUVCHILARIDA MUSTAQIL TAFAKKURNI SHAKLLANTIRISHDA KITOB BILAN ISHLASH KOMPETENSIYASINI RIVOJLANTIRISH METODLARI
18. Abdullayev, D. Y. O. (2026, April). IN STUDENTS DEVELOPING SOCIAL AND CIVIC COMPETENCES THROUGH DIGITAL TECHNOLOGIES ANALYSIS. In *International Conference Platform* (No. 4, pp. 17-22).
19. Абдуллаев, Д. Ю. Ў. (2025). Юқори синф ўқувчиларида фаол фуқаролик позициясини ривожлантиришнинг педагогик ва психологик хусусиятлари. *Science and Education*, 6(2), 441-452.
20. Uktamov, M. M. O. (2026). TECHNOLOGIES FOR EDUCATING STUDENTS USING ARTIFICIAL INTELLIGENCE. *European Review of Contemporary Arts and Humanities*, 2(4), 40-43.
21. Маматханова, Н. Т. (2017). Об исследованиях воли и волевых качеств личности в психологии. *NovaInfo. Ru*, 2(60), 511-515.
22. Kayumov, B. Z. O., & Kodirova, Z. S. Q. (2026). The influence of the virtual world on the formation of destructive behavior in adolescents. *Science and Education*, 7(3), 426-429.
23. Kayumov, B. Z. O., & Shokirova, D. (2026, April). STUDY OF HUMAN MENTAL ACTIVITY. In *International Conference Platform* (No. 4, pp. 112-115).

24. Yaxyoxonovich, A. U. (2025, December). BO ‘LAJAK O‘QITUVCHILARDA IJTIMOYIY INTELLEKTNI RIVOJLANTIRISHDA TANQIDIY FIKRLASHNING ROLI. In Partner conferences of the International Scientific Journal Research Focus (Vol. 1, No. 1, pp. 1129-1134).
25. Axmedxodjayev, K., Umarov, A., & Ortiqova, K. (2019). Investigation of the Ginning Process on ДП Series Saw Gin Stands. Scientific Research Publishing, Engineering, Engineering, 11, 523-530.
26. Ibrohim, M., & Xasanboy, Y. (2021). Theoretical analysis of the motion of raw cotton with uniform feeder in a cotton cleaner. The American Journal of Engineering and Technology, 3(01), 13-20.
27. Umarov, A., Ortikova, K., & Sarimsakov, A. (2020). Analysis of Speeds of Cylinders of Saw Gins and Linters and Determination of Critical Frequencies for them. Scientific Research Publishing, Engineering, 12, 715-722.
28. Umarov, A., Ortikova, K., Sarimsakov, A., & Kurbanov, D. (2020). Analys Of Control Of Manual And Automatic Regulation Of The Feeder Roll Of The Saw Gin Stand. Universum: технические науки: электрон. научн. журн, (9), 78.
29. Umarov, A. A., Ortikova, K., Sarimsakov, A. U., & Kurbanov, D. (2020). Analysis of the control of manual and automatic regulation of the saw gin feed rollers. Scientific journal" Universum: technical sciences"., 78, 22-26.
30. Umarov, A., Ortikova, K., & Sarimsakov, A. (2020). Analysis of Speeds of Cylinders of Saw Gins and Linters and Determination of Critical Frequencies for them. Engineering, 12, 715-722.
31. Ortikova, K., Umarov, A., & Inamova, M. (2023). Increasing The Efficiency of Saw Ginning Technology. The American Journal of Engineering and Technology, 5(10), 12-27.
32. Axmedxodjayev, K., Umarov, A., & Ortiqova, K. (2019). Investigation of the Ginning Process on ДП Series Saw Gin Stands. Engineering, 11, 523-530.
33. Ortiqova, K., & Inamova, M. (2025). Reducing seed intensity by optimizing the technological parameters of the linter machine,“. In International conference on advance science and technology (Vol. 2, No. 03).