



## STREAM APPROACH TO TEACHING RUSSIAN AS A FOREIGN LANGUAGE: EXPERIENCE AND PROSPECTS

*Nekhochina Lola Shakhobiddinovna*

*trainee teacher of the Department of Uzbek and Foreign Languages  
Namangan State Pedagogical Institute*

**Abstract:** The article discusses the possibilities and prospects of using the STREAM approach in teaching Russian as a foreign language. Examples of the use of STREAM, including robotics, are given, and prospects are outlined, such as the development of artificial intelligence and augmented reality in education, as well as the creation of international educational communities.

**Keywords:** STREAM approach, teaching Russian as a foreign language, interdisciplinary learning, digital technologies, motivation, key competencies, robotics, artificial intelligence, augmented reality, individualization of learning.

Integration of various fields of knowledge is becoming increasingly relevant in the modern educational space. The STREAM approach, combining science, technology, engineering, art and mathematics, as well as the practical implementation of projects, offers an innovative approach to learning that allows students to develop not only subject knowledge, but also key competencies of the 21st century.

The STREAM approach implies an interdisciplinary approach to learning, which allows children not only to gain knowledge in various fields, but also to apply it in practice to solve real problems. In the context of teaching Russian as a foreign language, the STREAM approach opens up wide opportunities for increasing motivation: Interactive tasks, projects and games based on STREAM technologies make the learning process more interesting and exciting for children; language skills development: the use of various digital tools contributes to the development of all types of speech activity: speaking, listening, reading and writing; formation of key competencies: the STREAM approach promotes the development of competencies such as critical thinking, creativity, collaboration and problem solving; individualization of learning: the use of various digital tools allows you to adapt the learning process to individual the needs of each child.

The main purpose of STREAM technologies in teaching foreign languages is not only to increase interest in the language, but also to expand language practice by integrating elements of science, technology and art. This makes it possible to form students' critical thinking, problem-solving abilities and cooperation skills, which is becoming important in the context of globalization and intercultural exchange.

Existing research and practical experience indicate the high effectiveness of the STREAM approach in teaching Russian as a foreign language to schoolchildren. For example, the use of robotics allows children not only to learn new words and grammatical constructions, but also to develop programming, logical thinking and communication skills.

The STREAM methodology (Science, Technology, Robotics, Engineering, Arts, Mathematics) combines several key disciplines, creating conditions for a holistic perception of educational material and its application in real tasks. For teaching Russian as a foreign language, such interdisciplinarity plays an essential role, as it allows students to simultaneously master language skills and develop thinking.

The use of STREAM in RCT training includes the following main components:

1. Scientific research: Students are introduced to basic vocabulary and grammar related to science, nature

and technology, which expands their vocabulary and allows them to speak on certain topics.

2. Technological and engineering projects: project activities stimulate the active use of language in the process of creating projects, presentations and discussing their ideas. This helps to develop communication skills and the ability to express your thoughts in Russian.

3. Robotics and Programming: Tasks with robots or basic programming elements give students the opportunity to develop the lexical and grammatical structures necessary to describe actions, commands and instructions.

4. Art and creativity: the use of theatrical productions, musical and artistic projects in Russian contributes to the development of creativity and allows students to master the language through exciting and memorable activities.

5. Mathematics and logic: solving logical and mathematical problems in Russian develops not only numerical literacy, but also the ability to apply the language in atypical situations, which stimulates cognitive development and critical thinking.

Advantages of using STREAM technologies for the development of Russian speech

The STREAM approach brings the following significant advantages in teaching Russian as a foreign language:

1. Increasing motivation to learn: project activities, games and the use of digital tools make the process of learning Russian more exciting. Students are actively involved in the process, as they can take the initiative, develop and implement their ideas.

2. Development of all types of speech activity: the use of STREAM projects allows students to practice speaking, listening, reading and writing, as well as integrate various activities within the framework of one project.

3. Building interdisciplinary skills and core competencies: STREAM helps students develop critical thinking, problem solving skills, collaboration and creativity, which ultimately makes their learning more holistic and integrated.

4. Individualization of learning: the use of digital tools and applications allows you to adapt tasks to the level of training of each student, thereby providing a more personalized approach to learning.

Practical examples of using the STREAM approach for RCT training

1. Projects with elements of robotics: for example, students can program small robots, describing their actions and the actions of the robot in Russian. This allows you to simultaneously study vocabulary related to directions, commands and movements, as well as develop skills for describing sequences of actions.

2. Interactive games and quests: such activities in Russian help to develop communication skills, respond quickly to tasks and use the language in real interaction with the teacher and classmates.

Russian theatrical performances and musical projects: through such forms of education, students can study Russian culture and develop their speaking skills by participating in productions in Russian or performing songs.

4. Project work on the creation of scientific presentations: students research and prepare reports on topics of interest to them using Russian terminology. This format encourages them to use the Russian language to search for information and present their results.

The prospects for the development of the STREAM approach in teaching RCT are very extensive. In the near future, we can expect:

- Expanding the range of technologies used: The emergence of new digital tools such as artificial intelligence and augmented reality will open up new opportunities for creating interactive and personalized learning materials.

- Integration of the STREAM approach into various educational programs: STREAM technologies will be increasingly introduced into preschool educational programs, which will ensure more effective teaching of Russian as a foreign language.

- Creation of international communities: International communities of educators and researchers involved in the development and implementation of the STREAM approach in teaching foreign languages will be created.

The STREAM approach represents a promising direction in the development of modern education. Its use in teaching Russian as a foreign language in education makes it possible to increase the effectiveness of

learning, make it more interesting and exciting for children. Further development of this area will contribute to the formation of children's not only language skills, but also the key competencies of the 21st century, necessary for a successful life in the modern world.

Taking into account the rapidly developing digital technologies and the introduction of artificial intelligence and augmented reality, in the future it is possible to create more personalized and interactive educational materials that will allow students to learn Russian even more effectively. The introduction of new technologies contributes to the creation of a more flexible educational environment in which each student can advance their studies at their own pace and according to their interests.

### List of literature:

1. Alekseeva, N. V. (2020). Information and communication technologies in education: prospects and challenges. *Pedagogical education in Russia*, 5(30), 95-102.
2. Ivanov, A. P., Smirnova, E. I. (2019). Problems and prospects of using ICT in school education. *Educational technologies and society*, 22(4), 55-64.
3. Johnson, D. & Maddux, C. D. (2018). Integrating ICT in Language Learning: Benefits and Challenges. *Journal of Educational Technology Research*, 36(2), 85-94.
4. L.S.Gavrilenko, Y.L.Lukin, V.I.Kugina., "Innovative pedagogy", Krasnoyarsk-Lesosibirsk, Issue 2019, p. 11
5. Абдулвохидов Э. «Актуальные проблемы педагогики в трудах Чингиза Айтматова». Монография. Наманган: Издательство «USMON NOSIR MEDIA», 2023 г.
6. Абдулвохидов Э. Педагогическая концепция Чингиза Айтматова в развитии педагогической и публицистической мысли. // *ACADEMICIA: An International Multidisciplinary Research Journal*. ISSN: 2249-7137. Vol. 11, Issue 3, March 2021. Стр. 1050-1057.
7. Akbarova Dildora Rustamovna. STIVEN KREN ASARLARIDA ADABIY OQIMLARNING UYG'UNLASHUVI. *Journal of new century innovations* 17 (1), 64-68, 2022
8. B.M. Toshpulotovna. IMPORTANT AREAS OF COMPUTATIONAL LINGUISTICS/ *International Multidisciplinary Journal for Research & Development* 11 (05)2024
9. B.M. Tashpulotovna. Development of Lingvokultural Inofons Competence on Russian Lessons/*International Journal of Formal Education* 2 (1), 65-69 1 2022
10. Дадаханова, Сайёра. "Средства выражения побуждения в современном русском языке." *News of the NUUZ* 1.1.9. 1 (2024): 286-288.
11. Дадаханова, С. 2024. Средства выражения побуждения в современном русском языке. *Зарубежная лингвистика и лингводидактика*. 2, 2/S (авг. 2024), 291–296. DOI:<https://doi.org/10.47689/2181-3701-vol2-iss2/S-pp291-296>.
12. Dildora, Sativoldiyeva. "NAMANGAN TOPONIYASIDAGI ETNOTOPONIMLAR XUSUSIDA." *Journal of Academic Research and Trends in Educational Sciences* (2023): 365-370.
13. Ahmadjanovna, D. G. (2024). Improving the scientific and methodological aspects of preparing students for effective communication techniques and innovative technologies in teaching foreign languages. *Ta'lim innovatsiyasi va integratsiyasi*, 15(3), 81-88.
14. Dehkhonova, G. A. (2024). THE CLASSIFICATION OF LEXICAL UNITS WITH FINANCIAL POSITION ACCORDING TO SCIENTISTS VIEW. *Academic research in educational sciences*, 5(CSPU Conference 1), 542-549.
15. Mamajonovna, Egamberdiyeva Shamsiya. "PROBLEMS IN THE STUDY AND CLASSIFICATION OF TURKISH LULLABIES." *International journal of artificial intelligence* 4, no. 03 (2024): 588-591.
16. Mamajonovna, Egamberdiyeva Shamsiya. "O 'ZBEK VA TURK ALLALARIDA OTA OBRAZINING QIYOSIY TALQINLARI." In *Konferensiyalar| Conferences*, vol. 1, no. 4, pp. 561-564. 2024.
17. Madaminova, M. S. Q. (2024). Building Fluency And Comprehension: Effective Techniques For Reading Instruction. *Academic research in educational sciences*, 5(CSPU Conference 1), 748-752.
18. Madaminova, M. (2023). МАКТАВ О'QUVCHILARIGA INGLIZ TILIDA MATN O'QISHNI O'RGATISHNING INTERFAOL TEXNOLOGIYALARI. *Ilm-fan va ta'lim*, 1(2).
19. Muminjonova Shahlo. (2024). *Academic Vocabulary. Teaching and Studying. Лучшие*

- интеллектуальные исследования, 29(1), 492–496. Retrieved from <https://web-journal.ru/index.php/journal/article/view/7498>
20. Muminjonova Shahlo. (2024). Academic Vocabulary. Teaching and Studying. Лучшие интеллектуальные исследования, 29(1), 492–496. Retrieved from <https://web-journal.ru/index.php/journal/article/view/7498>
21. ПАРДАБАЕВА, Дильфуза. "СУЩНОСТЬ ПОНЯТИЙ «ТВОРЧЕСТВО», «ТВОРЧЕСКАЯ ДЕЯТЕЛЬНОСТЬ» И «ТВОРЧЕСКИЕ СПОСОБНОСТИ»." News of the NUUz 1.1.7 (2024): 162-164
22. N.T. Ibragimova. ISJ Theoretical & Applied Science, 10 (66), 363-366
23. N.T. Ibragimova. INTERACTIVE METHODS IN TRAINING RUSSIAN LANGUAGE FOREIGN STUDENTS/Теория и практика современной науки, 37-39
24. Tojiddinova, N. H. (2024). METHODOLOGY OF DEVELOPING STUDENTS' LEXICAL COMPETENCE THROUGH COMICS IN PRIMARY ENGLISH CLASSES. International journal of artificial intelligence, 4(03), 582-587.
25. Nishonova, K. (2024). Methodology of Developing of Pupils' Lexical Competence Through Comics in Primary English Classes. Pubmedia Jurnal Pendidikan Bahasa Inggris, 2(1), 7-7.
26. Отаханова, Шохсанам. "ПРОБЛЕМНЫЙ МЕТОД ОБУЧЕНИЯ КАК СРЕДСТВО ФОРМИРОВАНИЯ КРИТИЧЕСКОГО МЫШЛЕНИЯ И ЯЗЫКОВЫХ НАВЫКОВ У УЧАЩИХСЯ." Yangi O'zbekiston ustozlari 2.26 (2024): 111-116.
27. Отаханова, Шохсанам. "ВЛИЯНИЕ ПРОБЛЕМНОГО ОБУЧЕНИЯ НА УЧЕБНЫЙ ПРОЦЕСС." ILM FAN XAVARNOMASI 1.2 (2024): 573-578
28. Turg'unov, Sherali. "O'ZBEK XALQ O'LANLARIDA ETNIK MANSUBIYAT IFODASI." Farg'ona davlat universiteti 2 (2023): 89-89.
29. Р. Хайрутдинова. ИГРОВАЯ МЕТОДИКА В ПРЕПОДАВАНИИ РУССКОГО ЯЗЫКА/International Journal of Education, Social Science & Humanities 12 (11), 38-41, 2024
30. Xayrutdinova Rushana. (2024). LINGUISTICOLOGY AND SOCIOLINGUISTICS. International Multidisciplinary Journal for Research & Development, 11(05). Retrieved from <https://www.ijmrd.in/index.php/ijmrd/article/view/1522>
31. Олимова М. ЖИЗНИ И ТВОРЧЕСТВА ИС ТУРГЕНЕВА С АКЦЕНТОМ НА ЕГО ЦИКЛ ОЧЕРКОВ "ЗАПИСКИ ОХОТНИКА" // ILM FAN XAVARNOMASI. – 2024. – Т. 1. – №. 2. – С. 579-581.
32. Олимова, М. Философские Содержание Творчества А. Чехова. International Journal Of European Research Output Issn, 2053-3578.
33. Абдулвохидов, Элёр, and Лола Нехочина. "Педагогические основы творческой деятельности ЛН Толстого." Science and Education 3.5 (2022): 1516-1520.
34. Чжен, Е. В., and Нехочина Лола. "ОБ ИСТОКАХ ПЕДАГОГИЧЕСКИХ ИДЕЙ ЛЬВА ТОЛСТОГО." Oriental renaissance: Innovative, educational, natural and social sciences 2.Special Issue 4-2 (2022): 791-794.