

MAIN ADVANTAGES OF USING “FLIPPED CLASSROOM” TECHNOLOGY IN “MOTHER TONGUE AND READING LITERACY” LESSONS

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Annotation: *This article will talk about the advantages of using Flipped classroom technology in classes to improve the teaching methodology of Mother Tongue and reading literacy, and a lesson project developed on the development of cognitive activity of students by organizing the topic “contrary meaning words” in 4th grade “mother tongue and reading literacy” on the basis of Flipped classroom (reverse class) technology.*

Keywords: *“Flipped classroom” (reverse class) technology, group work, Q & A chain, insert, reverse text, reflection, thought map*

INTRODUCTION. For many teachers, the “Flipped Classroom” (inverted classroom) technology is often interpreted as being almost synonymous with active learning (that is, education based on the active participation of students). In fact, there are many methods of active learning, and the flipped classroom is just one of them. The essence of this technology lies in the idea that delivering lectures or directly transmitting information during class time is not considered the most effective approach. Instead, students familiarize themselves with the lesson content independently – before the class – while classroom time is devoted to interactive activities that promote higher-order thinking skills.

Although this approach had been used in some subjects before (though not under the name “flipped classroom”), technological advancement has played a key role in its widespread adoption. This model assumes that there is little difference between a student listening to a lecture individually and listening to it in the classroom. However, in reality, these two situations differ significantly. For example, during an in-class lecture, social interaction occurs: students perceive each other’s ideas, facial expressions, and social responsiveness. At the same time, a traditional lecture can also be organized in an interactive format (there are recommendations and techniques available for conducting interactive lectures)[1].

LITERATURE REVIEW. In the field of pedagogy, issues such as organizing the educational process based on a cognitive approach, transforming students into active participants in the learning process, and developing critical and creative thinking have been thoroughly studied by scholars such as O. Musurmonova, T. Sulstonov, B.R. Qodirov, B.M. Ochilova, K.B. Qodirov, Sh. Do’stmuhammedova, D.Q. Asqarova, G.K. Alimova, M.X. Tashibekova, F. Abdug’opirova, Sh. Nurullayeva, N. Karimova, M. Asqarova, and N. Abdusamatova. Their research substantiates the activation of the cognitive process, learning based on personal experience, and ways of individualizing and intensifying learning activities.

In the countries of the Commonwealth of Independent States, scholars such as L.S. Vygotsky, A.N. Leontyev, S.L. Rubinstein, D.B. Elkonin, V.V. Davydov, P.Ya. Galperin, A.A. Smirnov, I.A. Zimnyaya, V.I. Andreyev, E.S. Polat, O.S. Gazman, N.F. Talizina, and N.E. Shiyarov have substantiated in their research the mechanisms of students' cognitive processes, including the development of perception, memory, thinking, and imagination. In particular, within the cognitive-competence approach developed by Zimnyaya, not the accumulation of knowledge, but the learner's readiness for activity, ability to think independently, and capacity for reflection are considered key indicators of educational effectiveness[2].

Among foreign scholars, B. Bloom, R. Sternberg, J. Bruner, H. Gardner, A. Bandura, J. Bergmann, A. Sams, and John Hattie have investigated approaches aimed at enhancing students' cognitive activity through constructivist learning models, flipped classroom technology, STEM/STEAM approaches, Inquiry-Based Learning, and Project-Based Learning methods.

However, the development of cognitive activity through the integration of flipped classroom technology and autogenic-type tasks, the adaptation of the flipped approach to the age characteristics of primary school students, the creation of a corresponding system of activities and tasks, and the integration of exercises that emotionally and psychologically prepare learners for cognitive activity into lessons have not yet been fully explored from a scientific and theoretical perspective.

RESEARCH METHODOLOGY. During the research process, methods such as the comparative analysis of scientific, methodological, and pedagogical literature related to the problem, as well as sources, State Educational Standards (SES), qualification requirements, curricula, long-term plans, subject programs, and textbooks were used. In addition, national and international experiences were comparatively studied, and methods including observation, interviews, questionnaires, experimental work, and mathematical-statistical analysis of results were applied.

ANALYSIS AND RESULTS. Improving the methodology of teaching the 4th-grade subject "Mother Tongue and Reading Literacy" is achieved through the use of "Flipped Classroom" technology in lessons, the active application of modern ICT tools, and the transformation of "subject-object" relationships into "subject-subject" and "object-subject" relationships.

Accordingly, a lesson plan was developed to enhance students' cognitive activity by organizing the topic "Antonyms" in the 4th-grade "Mother Tongue and Reading Literacy" subject based on the Flipped Classroom approach. Lessons organized on the basis of this approach contribute to activating students' cognitive skills such as independent learning, analysis, comparison, research, and creative thinking (Table 1).

Table 1

A 1-hour lesson plan on the topic "Antonyms"

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|-------------------------------|
| Grade: 4th Grade |
| Subject: Mother Tongue |

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| Lesson Type: Introduction of new knowledge; integrated lesson based on interactive activities | | |
| Technology: Flipped Classroom | | |
| Methods: Analytical Q&A, pair work, group analysis, problem-based learning, dramatization | | |
| Stage 1: Pre-class (Home Learning) | A 2–3 minute video lesson prepared by the teacher includes the following content: | Student’s task: |
| | What are antonyms? 4–5 examples: big – small, light – dark, strong – weak A brief explanation of their role in a text. | Watch the video. Write down 3 antonyms in your notebook and provide your own example for each. Prepare an oral response to the question: “Why do some words have opposite meanings?” |
| | Cognitive activity: independent acquisition of information; understanding logical relationships between words; stimulation of curiosity and interest in learning.. | |
| Stage 2: In-class Activities (Activation and Deepening of Knowledge) | Procedure for implementing Stage 2: | |
| | A)Activation (5minutes): Students read the 3 words they prepared at home.The teacher writes word pairs on the board: big – small, hot – cold, bitter – sweet, etc. Cognitive activity: recalling, selecting, speaking. | |
| | B) Analysis and Discussion (15 minutes) – Group Work: Each group is given the following task: 4 pairs of antonyms are provided. Students provide appropriate examples for each pair. They orally explain the difference between each word pair. Examples: “Clear – dim” (working with image selection) “Friend – enemy” (evaluation based on character actions) Cognitive activity: comparison, grouping, analysis, justification. | |
| | C) Creative Practice (10 minutes) – Pair Work: Students: Construct 2–3 sentences using antonyms; Identify the expressive differences between the sentences; Write a short text (2–3 sentences) and underline the antonyms used. Cognitive activity: creation, logical thinking, speech development. | |
| | D) Reflection and Assessment (5 minutes): “What new words did I learn today?” “Why are antonyms important?” | |

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| | Students complete a self-assessment card (I know / I partly know / I don't know). Cognitive activity: reflection, awareness of one's thinking, recognizing personal progress. | |
| Results and Developed Cognitive Skills: | Analytical thinking | Analyzes oppositional meanings of words |
| | Comparison | Identifies antonym relationships and distinguishes between them |
| | Creative thinking | Independently uses antonyms in their own sentences |
| | Speech activity | Expresses ideas coherently in oral and written form |
| | Reflective thinking | Evaluates what has been learned and justifies their own opinion |
| | Analytical thinking | Analyzes oppositional meanings of words |

In an experimental lesson conducted in the 4th grade on the topic "Antonyms," the use of Flipped Classroom technology demonstrated that students' internal motivation for learning significantly increased. They began to show greater activity in cognitive skills such as independent information acquisition, critical thinking, asking questions, and justifying their own opinions. A short video lesson prepared in advance helped students form initial understanding, interest, and questions regarding the topic, which created a strong foundation for organizing deeper, more active, and creative learning in the classroom[3].

During the in-class stage of the lesson, students worked in groups to identify antonyms and explain them using real-life examples. They also engaged in pair work to construct sentences and write short stories. In particular, their participation in higher-order thinking activities such as asking questions, listening to each other's ideas, and defending their own viewpoints served as an important indicator of the development of their cognitive activity.

Lessons based on such technology, on the one hand, ensure learners' independence in the learning process; on the other hand, they transform the role of the teacher, who becomes a facilitator and guide. This strengthens the learner-centered nature of education and develops students' sense of ownership over their learning process, which is a key requirement of modern educational concepts.

Furthermore, organizing education through Flipped Classroom technology significantly expands didactic opportunities. In particular:

- learners acquire knowledge in a convenient and understandable form;

- classroom activities are directed toward higher-order cognitive processes (analysis, comparison, generalization, creativity);
- group work and discussions enhance social and communication skills;
- reflective activities develop the ability to understand, evaluate, and correct one's own thinking.

The results observed in the above-mentioned lesson showed that more than 80% of students attempted to express their thoughts logically, were able to relate antonyms to real-life situations, and actively participated in creative tasks. In addition, question-asking activity increased, and students began to express personal attitudes toward the lesson content[4].

Of course, the success of such an approach is closely connected to the teacher's thorough preparation, students' active participation, family environment, and the degree of integration of the pre-class stage. However, it was proven that through a properly organized Flipped Classroom model, students develop a need for learning, independent information-seeking skills, logical thinking, willingness to admit mistakes, and a positive attitude toward learning.

The Flipped Classroom technology proves itself as an innovative didactic tool that ensures cognitive development, creative engagement, and interactive participation in primary education based on modern educational principles. Its systematic and purposeful use can help form primary school students as independent, inquiry-oriented, and active learners[5].

The essence of the Flipped Classroom technology is to change the traditional teaching sequence by enabling students to acquire knowledge at home and apply it in practical activities during classroom time. This approach is especially effective in the subject "Mother Tongue and Reading Literacy," as it provides broad opportunities for developing students' skills in expressing ideas, working with texts, enriching vocabulary, and improving speech activity [6].

The methodological and didactic opportunities of this approach were manifested as follows:

1. Opportunity to select methods aligned with cognitive development – problem-based learning, question chains, insert techniques, inverted text, reflection, and mind mapping activate students' cognitive processes, each serving a specific didactic purpose such as logical reasoning, semantic differentiation, and critical thinking[7].

2. Active work with textual and linguistic material – students analyze texts, express opinions, and use vocabulary meaningfully, which develops semantic thinking.

3. Learning through analysis and prediction – grammar and language topics are explored through interpretation, identification of meanings in sentences, and correction of misarranged words, forming cognitive operations.

4. Effective communication and reflective analysis – students test their knowledge in class, ask questions, compare ideas, and develop metacognitive skills

through reflective questions such as “What did I learn?”, “What was unclear?”, and “What new question do I have?”

5. Student-centered learning environment – Flipped Classroom adapts to individual needs and abilities, allowing each student to learn at their own pace and take responsibility for their learning process.

In the experimental lesson on “Antonyms,” all these opportunities were implemented. Students gained initial understanding through a short video lesson at home, and in class they actively engaged in group work, provided examples, constructed sentences, analyzed texts, understood semantic relationships, and developed the ability to listen to and evaluate each other’s ideas[8].

The didactic significance of this process is that the lesson shifted from “teacher-centered information delivery” to “student-centered exploration, application, and creation.” The student became not a passive recipient of knowledge but an active participant and co-creator of knowledge.

Therefore, teaching “Mother Tongue and Reading Literacy” through Flipped Classroom technology:

- encourages independent learning;
- activates work with linguistic units such as text, words, and sentences;
- integrates theory with practice;
- develops skills of expression, justification, questioning, and inquiry;
- gradually forms all stages of cognitive activity – from memorization to creative thinking[9].

This creates a foundation for shaping primary school students as active learners, communicative individuals, independent thinkers, and responsible participants in their own learning process.

CONCLUSIONS. In conclusion, the modern educational paradigm is aimed at shaping learners as active participants in the learning process and developing their skills in independent thinking, analysis, inquiry, communication, and decision-making. In particular, at the primary education stage, the “Flipped Classroom” technology is considered one of the effective approaches to achieving this goal. This technology creates rich didactic opportunities for enhancing students’ cognitive activity, individualizing the learning process, and implementing activity-based learning.

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