

# Methods Of Eliminating Speech Defects In Stuttering Children Using Logorhythmic Exercises

Zuhra Akhmedova

Acting Professor of the Nizami National Pedagogical University of Uzbekistan, Candidate of Pedagogical Sciences, Uzbekistan

**Received:** 29 November 2025; **Accepted:** 21 December 2025; **Published:** 25 January 2026

**Abstract:** This article presents the stages and methods for developing speech, motor skills, and speech breathing in preschool children with stuttering during logopedic rhythmics sessions. It also provides a detailed overview of the systematic speech therapy intervention framework implemented at each stage.

**Keywords:** Speech, pronunciation, articulatory apparatus, stage, logorhythmics, session, tempo, technology, neurological, psycholinguistic, psychological, complex, principle.

**Introduction:** In modern speech therapy, the issue of stuttering correction is being addressed on the basis of an integrated approach. In order to fully understand this process, we need to deeply analyze the theoretical and methodological foundations of speech therapy technologies. Although the concept of speech therapy technology appeared as a relatively new term in modern correctional pedagogy, its content has deep theoretical foundations.

Speech therapy training technology is an integral set of methods, tools and organizational forms of implementing a scientifically based, systematic and repetitive correctional and pedagogical process designed to achieve a specific goal. In the context of eliminating stuttering, technology provides a systematic answer not only to the questions "what to teach" (content), but also "how to teach" (process), "in what conditions" (environment) and "what result to achieve" (goal and criterion).

Logorhythmics is a special pedagogical technology based on the interaction of movements, music and words in the elimination and prevention of speech disorders. The following fundamental principles underlie logorhythmics:

Neurophysiological basis. Modern studies show that rhythmic movements synchronize brain activity, improve interaction and optimize the work of speech

centers. Functional MRI studies by S.V. Schmidt and colleagues showed the joint activation of speech and movement zones during logorhythmic exercises.

Psycholinguistic basis. Logorhythmics has a holistic effect on all levels of speech activity - motivational, semantic, linguistic and motor. The rhythmic-musical context facilitates the processes of speech planning and programming, supports lexical-grammatical selection.

Psychological basis. Logorhythmic exercises are emotionally positive, reduce fear and tension in children regarding speech, increase self-confidence and stimulate communicative activity. Activity in the form of a game with music does not activate psychological defense mechanisms, but, on the contrary, directs them towards natural fluency.

Physiological basis. Rhythmic movements normalize general and speech muscle tone, improve coordination and balance, and optimize respiratory function.

In the correction of stuttering, logorhythmics solves the following specific tasks:

1. Stabilization of speech motor skills. Rhythmic external support creates the foundation for the stability of speech movements. This is especially important for children who stutter, since their speech motor skills are unstable.

2. Formation of breathing-speech coordination. Logorhythmic exercises naturally regulate the rhythm of breathing and synchronize it with speech activity.
3. Development of prosodic components. Music serves as an intonational-rhythmic model, which helps to form the prosodic aspects of speech (tempo, rhythm, intonation, dynamics).
4. Improvement of the psycho-emotional state. The therapeutic effect of music reduces anxiety, improves mood, and provides emotional relaxation.

5. Development of social and communicative skills. Group logorhythmic exercises enrich the experience of communication, teach joint activities, and form skills for interacting with peers.

The effectiveness of logorhythmic exercises depends on their proper organization. It is appropriate to distinguish the following main principles:

1. The principle of complexity and systematicity. Logorhythms should not be used in isolation, but should be an organic part of the general correctional program. Each logorhythmic exercise should support and complement the main tasks of the speech therapist.

2. The principle of gradualness and consistency. Logorhythmic material should be arranged from simple to complex, from known to unknown, from statistical to dynamic. Sequence of stages:

- Initial: Simple rhythmic movements without words (clap, step);
- Preparatory: Rhythmic movements with words (song, counting);
- Basic: Complex rhythm-speech coordination (dramatization);
- Final: Independent performance, improvisation.

3. The principle of individualization. It is necessary to take into account the individual characteristics of each child: the form and severity of stuttering, psychological profile, level of musical development, motor coordination. Differential approach:

- Neurotic form: Maximum emotional support, gentle regime, positive environment;
- Neurosis-like: More repetition, clear instructions, motor exercises;
- Mild level: Complex exercises, rapid progression;

- Moderate level: Graduality, careful reinforcement.
- 4. The principle of emotional comfort. Logorhythmic exercises should take place against a positive emotional background, evoke a feeling of joy and satisfaction in children. Practical tools:
  - The plot of the game and dramatization;
  - Musical materials that are pleasant to children;
  - Creation of situations of success;
  - A system of praise and encouragement;
  - Visual and sensory enrichment.
- 5. The principle of music-movement-speech unity. This is the central, that is, the main principle of logorhythms - music, movement and speech should be inextricably linked, support and reinforce each other. Forms of integration:
  - Music sets the pace of speech;
  - Movement supports the rhythm of speech;
  - Speech gives meaning to movement;
  - All together creates a holistic image.

6. The principle of the game form. For 5-year-old children, the game is a leading activity. The effectiveness of logorhythms increases dramatically when organized in the form of a game. Game options:

- Plot game (travel, adventure);
- Assignment-based game (animals, professions);
- Competitive game (who is better, faster);
- Dramatization (staging a fairy tale).

Structure and content of the logorhythmic exercise. An optimal logarithmic workout should have a clear structure and last 25-30 minutes. We recommend the following structure:

#### I. INTRODUCTION (5-7 minutes).

Purpose: To prepare children for the lesson, to establish emotional contact, to activate the body.

Introductory exercises:

#### 1. Greeting (1-2 minutes)

The teacher and children stand in a circle:

The teacher (singing): Hello, hello, my friends!

Children (clapping): Hello, hello, dear teacher!

Teacher: How are you today?

Children (nodding): Very good!

This simple greeting is repeated at the beginning of each lesson and serves as a psychological effect for children - this is the time of logarithmics, a signal that this is a pleasant activity that should not be feared.

1. Rhythmic walking-march (2-3 minutes):

Music (4/4 time, andante):

Direction: Clockwise around the circle

Variations:

- Normal step (1 step): ta-ta-ta-ta
- On tiptoes (2 steps): tip-tip-tip-tip
- Kneeling (3 steps): top-top-top-top
- Walking backwards (4 steps): carefully

Speech therapy element: A word or syllable corresponding to each type of step is repeated, which teaches breathing-step-speech synchronization.

2. Musical greeting (1-2 minutes):

Each child sings his name in turn, the rest respond:

Child: "I am Zulfiya!" (putting his hand on his chest)

All: "Hello, Zulfiya!" (waves hands)

This exercise increases speech activity.

II. MAIN PART (15-18 minutes)

The main part consists of several blocks, each of which solves a specific task.

A. Breathing-voice block (3-4 minutes)

Goal: Develop breathing, train the vocal apparatus, form breathing-voice coordination.

Exercise 1: "Wind and leaf"

Preparation: Children stand upright, arms down

Inhale: Raise arms up (4 times)

Teacher: "The wind blew..."

Exhale: "Fff..." (8 times), arms slowly down (as if a leaf is falling)

Repetition: 4-5 times, each time the exhalation lasts longer.

Articulatory-mimic block (3-4 minutes)

Goal: Activate articulatory and mimic muscles, increase mobility, develop figurative thinking.

Exercise: "Animal Park" (with music)

1. Elephant (lip exercise):

Movement: Stretching the lips forward "tube"

Sound: "Y-y-y" (5 sec)

2. Tipratikon (tongue exercise):

Movement: Spreading the tongue to the lips "saucer"

Sound: Moving the tongue left-right "lick-lick"

3. Frog (cheek exercise):

Movement: Inflating-deflating the cheeks

Sound: "prr-rrr" (vibration)

4. Monkey (facial expression):

Movement: Wrinkling the face, squinting

Sound: "O-o-o, a-a-a, i-i-i"

Rhythmic-coordination block (4-5 minutes)

Goal: To develop general coordination, to form a rhythmic sense, to ensure the unity of speech and movement.

Exercise 1: "Applause-rhythm"

Simple rhythm (2 pieces):  | 

The teacher shows, the children repeat

Complex rhythm (3 pieces):  | 

 – applause, | – pause

By syllable: ta-ta-ta | ta

By word: Ma-ma-ma | ma

By speech: I came home

Exercise 2: "Coordination – left-right"

1 piece: Right hand forward → "right!"

2 pieces: Left hand forward → "left!"

3 pieces: Right foot forward → "right!"

4 pieces: Left foot forward → "left!"

Difficulty: Increasing speed, mixed combinations

Speech-motor dramatization block (5-6 minutes)

This is the central part of logorhythmics, where speech, movement and music are fully integrated.

Pedagogical explanation: In this exercise, breathing (one breath per phrase), rhythm (4), tempo (gradual acceleration), intonation (different emotions), coordination of movements - everything is combined. This is very important for a stuttering child.

III. Final part (3-5 minutes)

Purpose: To transfer the body to calm down, emotional relaxation, positive ending. Relaxation.

All children stand in a circle, holding hands:

Teacher: "What did you like today?"

Children take turns: "I liked the snowman", "I liked the cat"

Teacher: "You all participated very well! Let's clap our hands!"

The effectiveness of logorhythmic training largely depends on the professional skills of the teacher.

In 5-year-old stuttering children, speech therapy based on complex methods (logorhythmics, psychological correction, family integration) is significantly more effective than traditional methods and is considered an optimal strategy for eliminating stuttering.

#### **REFERENCES**

1. Арутюнян Л.З. Нормализации речи при заикании. Заикание: проблемы теории и практика. - М.: 2001.
2. Axmedova Z, Ayupova M, Xamidova M. Logopedik o'yin. T.: 2013.
3. Mo'minova L.R. " Maktabgacha, maktab yoshidagi bolalarda duduqlanish va uni bartaraf etish metodikasi" ma'ruzlar matni. T.: 2008.
4. Выгодская И.Г., Пеллингер Э.Л., Успенская Л.П. Устранение заикания у дошкольников в игре. — М.: Просвещение, 2014.
5. Пулатова. Х.М. Логопедик ритмика. Методик қўлланма. -Т.: 2017.