

Strategies for Developing 6–8 Year-Old Children’s Singing Intonation

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Abstract. On the basis of the diagnostic study carried out in the framework of the international project “Coordination between 6–8 Year-Old Children’s Musical Hearing and Vocal Apparatus during the Process of Singing: Comparative Study in Latvia, Lithuania and Taiwan” the following problems were defined for those involved in the experiment in Latvia: children’s voice diapason and intonation (undeveloped voice diapason, which does not at large surpass quarto-tertian; inaccurate intonation of melody, bordering “speaking voice”; intonation of the general ascending and descending movement of melody by inaccurate inner filling), typical cases of inaccurate intonation in the process of singing at every age group of children; as well as strategies and didactic material was elaborated for forming and developing singing intonation at different stages of 6–8 year-old children in the framework of case study.

Keywords: *the process of teaching singing, intonation, strategies, didactic material.*

Singing is the basis for musical education and one of the types of musical activity of children. Child’s emotional, musical and cognitive development takes place in the process of singing (Davidova, Zavadska, Rauduvaite & Chuang, 2017). However, teachers of music face the problem of inaccurate intonation of 6–8 year-old children in the process of singing. Children singing off key hamper the development of all the other children in the group/class/choir. Different levels of musical development among children create great problems in organising the teaching process and developing personality’s singing

culture as a whole: this is a topical issue in modern musical education (Welch, 1991; Hennessy, 2002; Pribujsiene, Uloza & Kardisiene, 2011; Davidova, Zavadzka, Šeršņova, Rauduvaite & Chuang, 2015). Thus, elaboration of singing teaching strategies for children is important. Furthermore, these strategies must be based on building a sequence of teacher's activities and creation of teaching environment for further development of intonation and singing skills.

In 2015, an international project "The Coordination between Musical Hearing and Vocal Apparatus of 6–8 Year-Old Children during the Process of Singing: Comparative study in Latvia, Lithuania and Taiwan" was launched. The aim of the project is to determine and experimentally verify teaching strategies for the development of coordination between musical hearing and the vocal apparatus of 6–8 year-old children during the process of singing in Latvia, Lithuania and Taiwan, and to identify and determine the levels of the development of coordination between 6–8 year-old children's musical hearing and the vocal apparatus during the process of singing.

In the framework of the project, a diagnostic study was carried out and 225 children aged 6–8 years were tested: 75 children in each age group were tested in Lithuania, Latvia, and Taiwan. The researchers randomly selected one class (group) from the pre-primary groups, first and second forms. The number of children in each form equaled 25 (in total) in every country (Rauduvaite, Lasauskiene, Abramauskiene, Davidova & Chuang, 2016).

Children's voice was tested by using the Children Singing Voice Measure Scale. The Children Singing Voice Measure (CSVM) elaborated by M-J. Chuang (Chuang, 2010; 2011a; 2011b; 2012) was used in this study (for more details see Davidova, Zavadzka & Ming-Jen Chuang, 2016).

As a result of the diagnostic study, problems were identified that cause inaccurate intonation for children. Based on the conducted research in Latvia, the percentage data highlighted problems related to children's voice diapason and intonation:

- undeveloped voice diapason, which does not at large surpass quarto-tertian;
- inaccurate intonation of melody, bordering "speaking voice";
- intonation of the general ascending and descending movement of melody by inaccurate inner filling.

An inaccurate intonation of even a few students has a negative effect on the general sounding, it interferes with children who sing well by spoiling their musical ear. Typical cases of inaccurate intonation were identified in each age group of children in the singing process and specific strategies were developed in the framework of the case study. According to F. Abrahams and P. Head (Abrahams & Head, 2005), in music pedagogy case study both a strategy and a method, which should contribute to defining the research problem and to its solution in a form of a dialogue.

The aim of research: to elaborate strategies and didactic material for forming and developing 6–8 year-old children's singing intonation in the framework of a case study.

Research methods: theoretical analysis, generalization of pedagogical experience.

Peculiarities of 6–8 year-old children's singing intonation. Intonation – from the Latin *intono* – 1) pronounce in singing, 2) sing. Musically and acoustically, correct reproduction of the height and nature of the sounds (harmonies). The definition of intonation is the sound pattern of phrases and sentences produced by pitch variation in the voice (<http://www.thefreedictionary.com/intonation>).

In turn, musical intonation, unlike speech, has its own peculiarities, since it contains a musical image. The musical intonation in European musical culture operates with tones of precisely fixed height, and is based on a special musical-sound system and rhythmic organization (Терентьева, 1990).

The famous Russian scientist B. Asafiev (Асафьев, 1971) claimed that all musical art has an intonational basis, and any thought, to be expressed musically, takes the form of intonation.

75 children aged 6–8 years participated in the diagnostic study from Latvia. The number of children who do not know how to intone and intonate approximately, is very significant. On average, in each of the three age groups of 25 people, there are only five to six children who intone accurately, that is approximately 20%. The rest of the children intone - more often approximately, or sing on two, three notes, or just completely “speech-sing” (such singers are called “buzzer”).

What is the reason for the appearance of such children – “buzzers”? The Russian psychologist A. N. Leontiev (Леонтьев, 2000) writes that most of the world's languages are “timbre-articulate”; they are based on the recognition of vowels and consonants, and not on the distinction of the voice's pitch. By 30% of the “timbre-articulate” population speech is perceived by the colour of vowel sounds. For example, if you sing the vowels “e” and “u”, then for many it will seem that “u” sounds lower than “e”. A child, first, learns to speak; it means that, as stated by A. Leontiev, “speech hearing” develops earlier. The development of speech hearing “blocks” the development of the ear for music. The melody of the song is “recognized” indirectly, through speech. Therefore, the speech hearing is at the head of the auditory perception. Will it develop into musical, in the opinion of the psychologist; it largely depends on the environment.

However, in languages such as Chinese or Vietnamese, pitch is an integral part of the speech. Therefore, we can assume that the children – participants of the project from Taiwan – are endowed with a more subtle ear for music.

All children (project participants) with intonation difficulties can be divided into three groups, each of which can be characterized as follows:

- children have a limited diapason, the sound attack is either aspirated or very hard, which can also cause inaccurate intonation. Some sing very quietly, others very loudly. Many of them lack the skill of connecting sounds *legato* – these are children with violated vocalization. Some children also sing in a “whisper”;
- children who have difficulty with adaptation in a group (class), they are self-conscious, shy, “blocked” children;

- children whose disorders are caused by any of the chronic diseases of the organs of voice formation, as well as diseases of the central nervous system. More often than not, children with psycho-neurological disorders remain “buzzers” for the entire period of education. It is extremely difficult to teach such children to sing accurately.

Strategies for forming and developing accurate intonation. By taking into account the above mentioned diagnostic results, strategies for forming and developing 6–8 years old children’s accurate intonation were elaborated.

In order to intone, it is necessary to imagine the sound image – a kind of “pattern” which one’s own attempt at reproduction is compared with. According to this pattern, the motor system is regulated, when the sound image causes a corresponding motor representation, therefore it is called the regulatory image (Кравченко, 1993). The formation of sound occurs not only in the sound and motor form: this includes visual, vibrational representations. Based on this, a motor command is given from the centre to the muscles, which is manifested during reproduction. By evaluating the result, a system of analysers turns on in the head with the auditory ones, sending the information back to the centre. This allows us to talk about feedback. Based on the analysis and synthesis of information, the result is compared with the pattern. In the case when the sound of the pattern and the attempt do not agree, corrective amendments are made: odd, unnecessary movements are removed, others are added and the attempt to reproduce the sound is repeated. Only a large number of repetitions makes it possible to develop and polish the many motor and vocal skills, corresponding to the most different sound results for creating the desired palette of sounding (Морозов, 2002).

Work with inaccurately intoning children takes place with a musical accompaniment or with the help of a teacher. As a teaching material only simple melodies are used with a small diapason, only after repeated preliminary listening. It is advisable to begin with the formation of vocal and intonation coordination. The child hears that he/she sings not the same sound as the teacher, but he/she cannot sing it correctly, that is, these children do not have coordination between the hearing and the voice. Often such children use the chest register for voice formation. There are also counter cases when the child only intones on high sounds and cannot reproduce lower sounds: such children try to sing in the same manner as they speak. They are not able to go beyond the primary tones, because they cannot use other ways to manage voice cords.

Vocal practice teachers J. Shaw (2013) and E. Leshchinskaya (Лещинская, 2011) recommend not to separate such inaccurately intoning children from the group of good singers. Julia Shaw also talks about the need to reduce distracting physical impact and notes two points for students’ physical placement in classroom:

- place inaccurate singers on outside edges near accurate singers. They will be able to hear both themselves and an accurate model, promoting self-monitoring;

- place two accurate singers together, rather than isolating single accurate singers between inaccurate singers (Shaw, 2013).

E. Leschinskaya (Лещинская, 2011) recommends to put inaccurately intoning children in the first row, so that they can hear the correct singing.

The main task of the initial stage of the formation of vocal and intonation skills is the use of such methods that would allow the child to create a vocal and musical image as soon as possible. The simplest way is the method of demonstration – showing the sound by the teacher him/herself. In the beginning, the movement necessary for correct voice formation (lower jaw, lips, form of mouth opening, yawn, movement of the respiratory muscles) is also applied. All this must necessarily be combined with an explanation. Thus, children develop knowledge about the basic laws of vocal sounding and its reproduction.

At the age of 6–8 years, children are more likely to perceive exercises that form and develop not only articulation, but also contribute to the development of imagination, musical ear, memory, and also help the child to reveal the artistic image (Zavadska & Davidova, 2017).

A. Formation of accurate intonation – initial stage

It is necessary to start with songs on one sound, gradually expanding the diapason. For children it is significantly difficult to intonate a repeating sound – the interval is a pure prime. The intonation thus “slides”, an inaccuracy appears in the singing. An ascending big second and a descending small second are the most difficult intervals for intonation. There is a danger of inaccurate intonation of the upper sound – singing in a low position and singing as if with “entrances”. To avoid such a performance, it is possible to use the analogy of the gradual movement like on the stairs and explain that to the upper sound one has to as if “step over”. The lower sound in the descending second is necessary to sing with a tendency to increase, as if pulling oneself to the top. Diatonic halfnotes (for example, mi-fa) are intoned narrowly, but chromatic halfnotes (for example, fa-sharp) – are intoned widely.

Many children cannot switch from talking to singing. When solving this problem, it should be remembered that vowels play a big role in singing, and therefore vocal exercises should be based on the exaggerated singing of comfortable “musical” vowels, for example, on the vowel “u”.

Formation and development of the skill of pure singing in children should begin with small vocal exercises, built on separate intonational turns. For example, with the singing of a descending tertiary intonation (it is more convenient to sing from the top down). For each melodic turn the teacher can choose melodies that are convenient for singing, which are sung with words from different sounds. To consolidate individual intonations, various game forms are useful, since the game allows the child to work in the lesson not passively, but creatively. A game-like start helps the child to learn the ma-

terial more easily, to mobilize attention. As an example, you can consider the game-like vocal exercise “Acquaintance”:

Vocal exercise “What’s your name?” The aim of the exercise: learn to intonate the interval of the descending minor third.

The course of the exercise: a) children stand in a circle, the teacher is in the center; b) the teacher performs the singing, while showing by hand which of the children he/she asks and simultaneously invites to answer; c) the child addressed by the teacher sings his/her name (for example, *My name is Sandra*, and so on) to the chant of the descending little third.

The task in this creative game is complicated by the fact that the teacher can change the tonality every time the question is asked, sing the melody at different heights. By this the teacher provokes children to different tonal answers.

This kind of exercises should not be changed often, as their repetition contributes to the formation of vocal-intonation skills, in addition, it is good, if the vocal exercises are connected with the studied material, this allows to reinforce it once again.

B. The development of vocal skills of intoning with the help of warm-up singing

One of the types of work on the formation and development of vocal skills is warm-up singing. Warm-up singing consists of special vocal exercises and represents a material on which specific qualities of singing voice are purposefully developed in children. Warm-up singing is done at the beginning of classes and perform the function of setting up, preparing the vocal apparatus for work on the singing repertoire.

It is necessary to consider the following requirements for the selection of material for warm-up singing:

- warm-up singing should have be universal character, which is especially important in collective, choral classes;
- relative stability, persistence of individual techniques used by the teacher for a long period;
- it is necessary to periodically supplement the group of vocal techniques.

Warm-up singing on half-tones strengthens intonation and develops hearing. The most comfortable vowel for singing is “e”. Half-tones are sung on “e” up and down from the primary tone, first with piano support, then without it. In order for the children to hear themselves, they must sing quietly, without forcing the sound. Small songs are better to sing without accompaniment. The vowel “a” also liberates the voice apparatus.

In the warm-up singing can be presented the elements found in the vocal-choral works in different versions. In the work on the formation and development of vocal intonation, it is necessary to take into account the following factors:

- voice should be developed on the basis on the primary sounds;
- the diapason of the voice which you can work within, for weak, singly little developed voices – just a few tones (mostly from three to five), for correctly intoning singers – an octave. In both cases, there should be no tension;

- the pace of work should not be rapid, it is necessary to work gradually, without haste;
- do not force the sound. Singing follows a moderate sound'
- the greatest attention should be paid to the quality of sound and freedom when singing, to remove any barriers;
- of great importance is the work on the evenness of the sound power (on one, on different sounds, on the whole phrase). It is advisable to carry out this work in an even more limited diapason. It is necessary to equalize all sounds in terms of sound quality.

In this context, as an example can serve the exercises and warm-up singing for the reception of *glissando*. "Glissanding" on vowel sounds is one of the ways for achieving pure intoning. Glissanding is done in a small diapason at different speed and relatively long stops on low or high sound.

Game and warm-up singing "Clowns". The aim of the game: liberation of the vocal apparatus from impaction, mobilization of attention.

The course of the game: a) children line up in two rows (groups) opposite to each other, between them there is a teacher; b) the teacher explains the rules of the game: from the first group, the children indicated by the teacher will glide "roll" from a certain note on the vowel "a" to a fifth down, and children from the other group from the same lower sound will "swim up" to the fifth up on the sound the vowel "u"; c) the teacher demonstrates the singing and then shows by his/her hand up or down, while pointing to one of the children, inviting to glissanding.

For greater brightness of the musical image, children's faces can express "surprise" when moving upwards or, vice versa, "regret" when moving down. Emotion can not only be intoned, it must invariably be supplemented by facial expressions, gestures, plasticity and movement.

After several sessions with this song, you can switch to alternating separate sounds of different heights without glissanding (all children participate in this), completing the exercise with the sound of maximum duration.

An interesting fact is that a child cannot sing a sound one tone higher than his primary zone (Welch, 1991). However, six or seven steps higher, while using a different manner of sound generation – he/she can do it, and, as a rule, the child begins to immediately correctly intone the given tones. It is established that it is easier for children to hear higher sounds of the first octave than the lower ones (Леонтьев, 2000). Based on this fact, it is possible to work on the accuracy of intoning and switching registers (from breast to *falsetto*).

There is a method when, skipping an octave up from the primary tones, the child is asked as if to squeak some sound in a thin voice. This will help to switch it to another register, *falsetto*. In this study, a game and warm-up singing is used, which allows to fix individual intonation turns:

Game and warm-up singing "Octave echo". The aim of the game: mastering of octave interval intonation.

The course of the game: a) the teacher sings on a low note a quarter note; b) the children "mimic" this sound with two eighth notes, taken an octave higher.

C. Fixing vocal-intonation coordination

If in the first and second stages children managed to cope with their voice and now they can repeat simple melodies quite purely, then in the third stage it is necessary to fix this ability, to make grasping of the voice more confident and accurate. Fixing of vocal skills is automatic and strengthens the stereotypes in the cerebral cortex. Skills are easy to perform without requiring much attention. Children "mastered" the voice, the voice has all the necessary qualities, it sounds smoothly, easily, freely on the entire diapason. Automatism makes it possible to manifest variants of vocal skills, which is the basis of various nuances.

In the early stages, there is a certain unidimensional sound. During this period, attention can be fully transferred to the performance tasks, the transfer of emotional and semantic content. Gradually, this will lead to the development of dynamic and timbre voice capabilities.

At this stage, it is possible to continue to work on previous exercises, paying attention to the accuracy of intonation. To this end, students should be taught to listen and control their singing. It is possible to sing small, uncomplicated songs on the vowel "u" or on the syllable "ku", from time to time stopping at any of the sounds to listen and reconcile the intonation. It is useful to give all the musical material without harmonic accompaniment, duplicating, only the melodic line.

The theatricalisation of songs with playing moments and movements is also an additional source of creativity and joy in the classroom. Games related to intoning have a great success among children:

Game "Live Chord". The aim of the game: fixing vocal-intonation skills.

The course of the game: a) children are divided into three groups – these are the three stable sounds of the major chord – I–III–V steps of the tune (for example, re-fa sharp – la); b) the teacher chooses one child – the conductor; c) the "conductor" gestures to show which sound each of the three groups should sing; d) students change places, each of the three groups sings another note, the game repeats.

At the first stages, all vocal exercises and games are intoned with piano accompaniment. As the correct intonation develops, the need for accompaniment disappears.

Pure intonation is not an end in itself, for this skill greatly facilitates the process of singing and learning of songs.

Conclusions

Vocal intonation is the exact reproduction of sounds in height. The purity of intonation depends on the degree of development of musical ear and on the volume of auditory representations. Typical problems of impure intonation of the studied age group of children (6–8 years) include: undeveloped voice diapason, inaccurate intonation of melody, sound attack either aspirated or very hard.

The strategies of formation and development of vocal intonation developed in the study can be used with similar intonation problems in working with children 6–8 years old. Vocal exercises, warm-up singing exercises, “intonational” games are the basis for the formation of accurate intonation.

Purity of intonation in singing requires constant work on accurate reproduction of sounds in height and direction of movement of the melody. Intonation develops singing data (widens the diapason), the sense of tonality, musical memory and imagination, which in turn further facilitates the learning of two and three part works.

References

- Abrahams, F., & Head, P. D. (2005). *Case Studies in Music Education*. Chicago: GIA Publications.
- Asafev, B. (1971). *Muzykal'naja forma kak protsess*. Moskva: Muzyka. [Асафьев, Б. (1971). *Музыкальная форма как процесс*. Москва: Музыка.]
- Chuang, M. J. (2010). *A Cross-cultural Investigation of Children Singing Voice Development*. Taipei: KAWAI Music Publishers.
- Chuang, M. J. (2011a). *A cross-cultural Investigation of Children's Use of Singing Voices and Echo Singing Pitch-matching Accuracy: Examples in Taiwan, Vietnam, and China I*. Taipei: KAWAI Music Publishers.
- Chuang, M. J. (2011b). *A Cross-cultural Investigation of Children's Use of Singing Voices and Echo Singing Pitch-matching Accuracy: Examples in Taiwan, Vietnam, and China II*. Taipei: KAWAI Music Publishers.
- Chuang, M. J. (2012). *Children Singing Voice and Sense of Tonality in Singing*. Taipei: KAWAI Music Publishers.
- Davidova, J., Zavadzka, G., & Chuang, M.-J. (2016). Level of the development of coordination between 6–8 year-old children's musical hearing and vocal apparatus: Diagnostics results in Latvia. *Journal of Teaching and Education*, 6(1), 131–136. Retrieved from <http://www.universitypublications.net/jte/0601/pdf/M6K50.pdf>.
- Davidova, J., Zavadzka, G., Rauduvaite, A., & Chuang, M.-J. (2015). Physiological features of developing 6–8-year old children's vocal apparatus. *Problems in Music Pedagogy*, 14(1), 119–129.
- Hennessy, S. (2002). *Music 7–11: Developing primary teaching skills*. London: Routledge.

- Kravchenko, A. M. (1993). *Sekrety bel'kanto*. Simferopol': Redotdel Krymskogo komiteta po pečatī. [Кравченко, А. М. (1993). *Секреты бельканто*. Симферополь: Редотдел Крымского комитета по печати.]
- Leontev, A. N. (2000). *Leksii po obshej psihologii*. Moskva: Smysl. [Леонтьев, А. Н. (2000). *Лекции по общей психологии*. Москва: СМЫСЛ.]
- Leschinskaja, E. I. (2011). *Metody ustraneniya netochnogo intonirovaniya u detej mladšego shkol'nogo vozrasta*. [Лещинская, Е. И. (2011). *Методы устранения неточного интонирования у детей младшего школьного возраста*.] Retrieved from https://sites.google.com/a/shko.la/ejrno_1/vypuski-zurnala/vypusk-10-iun-2011/innovacii-metodika-i-praktika/metody-ustraneniya-netochnogo-intonirovaniya-u-detej-mladsego-skolnogo-vozrasta.
- Morozov, V. P. (2002). *Iskusstvo rezonansnogo penija. Osnovy rezonansnoj teorii i tehniki*. Moskva: Iskusstvo i nauka. [Морозов, В. П. (2002). *Искусство резонансного пения. Основы резонансной теории и техники*. Москва: Искусство и наука.]
- Pribujsiene, R., Uloza, V., & Kardisiene, V. (2011). Voice characteristics of children aged between 6 and 13 years: Impact of age, gender, and vocal training. *Unbound Medline*, 36(4), 150–155. doi: 10.3109/14015439.2011.569756
- Rauduvaite, A., Lasauskiene, J., Abramauskiene, J., Davidova, J., & Chuang, M.-J. (2016). Development of the primary and junior school children's singing voice in musical education classes. Examples in Lithuania, Latvia and Taiwan. In *The 4th International Virtual Conference on Advanced Scientific Results* (pp. 113–118). doi: 10.18638/scieconf.2016.4.1.370
- Shaw, J. (2013). *Strategies for Working with Inaccurate Singers*. Northwestern University. Retrieved from https://www.ilmea.org/site_media/filer_public/2013/01/11/shaw.pdf.
- Terenteva, N. A. (1990). *Hudožestvenno-tvorčeskoe razvitie mladših shkol'nikov na urokah muzyki v protsesse tselostnogo vosprijatija različnyh vidov iskusstv*. Moskva: Prometej. [Терентьева, Н. А. (1990). *Художественно-творческое развитие младших школьников на уроках музыки в процессе целостного восприятия различных видов искусств*. Москва: Прометей.]
- Welch, G. (1991). The developing voice. In L. Thurman, & G. Welch (Eds.), *Body Mind and Voice: Foundations of voice education* (pp. 704–718). Minneapolis, MN: Voice Care Network.
- Zavadskaja, G., & Davidova, J. (2017). Teaching strategies for the development of 6–8-year old children's articulatory apparatus during singing. *Problems in Music Pedagogy*, 16(1), 95–105.

6–8 metų amžiaus vaikų intonavimo lavinimo dainavimo metu strategijos

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Santrauka

Dainavimas yra viena iš pagrindinių vaiko muzikinio ugdymo formų, daranti didelę įtaką bendram vaiko ugdymuisi (Welch, 1991; Hennessy, 2002; Pribujšienė, Uloza ir Kardisienne, 2011; Davidova, Zavadska, Šeršņova, Rauduvaite ir Chuang, 2015). Nepaisant vaikų dainavimo mokymosi studijų gausos, stokojama empirinių tyrimų apie 6–8 metų amžiaus vaikų muzikinės klausos įtaką lavinant dainuojamąjį balsą. Nuo 2015 m. vykdomo trišalio tarptautinio projekto „6–8 metų amžiaus vaikų muzikinės klausos ir balso aparato koordinacija dainavimo proceso metu: lyginamoji studija Latvijoje, Lietuvoje ir Taivane“ tikslas – apibrėžti 6–8 metų amžiaus vaikų muzikinės klausos ir balso aparato koordinacijos dainavimo proceso metu mokymosi strategijas (kryptis) ir patikrinti jas eksperimentiškai.

Tarptautinio projekto tyrime dalyvauja 225 6–8 metų vaikai, po 75 Lietuvoje, Latvijoje, Taivane. Atsitiktiniu būdu buvo pasirinkta po vieną ikimokyklinio ugdymo grupę bei po vieną pirmą ir antrą klasę pradinio ugdymo mokyklose. Kiekvienoje klasėje ir grupėje pasirinkta po 25 vaikus (Rauduvaite et al., 2016). Vaikų balsai buvo testuojami taikant *Vaikų dainuojamojo balso vertinimo skalę* (Chuang, 2010, 2011a, 2011b, 2012).

Tyrimu nustatytos 6–8 metų amžiaus vaikų netikslaus intonavimo dainavimo metu priežastys: siauras balso diapazonas (iki kvartos apimties), dainavimas „šnekamuojų balsu“, nepakankamas garso aukščio suvokimas keičiantis melodinei linijai; ir apibrėžtos vaikų intonavimo lavinimo dainavimo metu strategijos: tikslesnės intonacijos formavimas jau pirminiame vaikų muzikinio ugdymo etape; specialūs dainavimo pratimai, padedantys reguliariai lavinti intonavimą, intonavimo koordinacijos fiksavimas.

Esminiai žodžiai: 6–8 metų vaikų dainavimo procesas, intonavimas, strategijos, didaktinė medžiaga.

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