

2009. Upl: <https://www.ludovakultura.sk/wp-content/uploads/2017/10/spis-a-saris-final.pdf>

2. Hudec K. Slovenská ľudová pieseň [Slovak folk song]. Bratislava: Slovenská akadémia vied, 1949.
3. Hudec K. Slovenské ľudové piesne [Slovak folk songs]. Bratislava: Štátny ústav pre slovenskú ľudovú pieseň, 1950.
4. Móži A. Slovenský hudobný folklór [Slovak musical folklore]. Bratislava, Ústredná knižnica a ŠIS VŠMU. p. 51-52, 1989.
5. Strenacikova M. Slovak folk songs and general music education. Studii de muzicologie. Iasi: Editura Artes, 2023. № 108. Pp. 181–190,
6. Žilka T., Obert V., Ivanová M. Teória literatúry pre gymnáziá a stredné školy [Theory of Literature for Grammar and Secondary Schools]. Bratislava, OG – Vydavateľstvo Poľana s.r.o., 2002.

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## **MUSIC-ART EDUCATION OF CHILDREN WITH AUTISM SPECTRUM DISORDERS**

**1. Autism spectrum disorders.** Autism spectrum disorders (ASD) belong to the category of pervasive developmental disorders (F84). These include, for example, infantile autism, childhood disintegrative disorder, atypical autism, Asperger's syndrome, and transitional autistic syndromes, pervasive developmental disorder not otherwise specified etc. Individuals diagnosed with ASD may exhibit symptoms of varying severity and intensity, from severely impaired social functioning, loss of mental and language skills and seizure disorder to highly functioning individuals with no apparent symptoms in normal situations.

Asperger's syndrome is a frequently occurring disorder within ASD on the milder end of the spectrum. In contrast to childhood autism, the child's speech is not significantly affected, intelligence is

within the norm, the child is able to focus on certain topics, handle daily life, but his/her social interaction is severely impaired.

**2. ASD symptoms.** The main symptoms include impairments in social interaction, communication (eye contact, smiling, facial expressions, body postures, difficulties in forming peer relations, forming friendships), and tendencies towards stereotyped and ritualistic behavior. The first symptoms may appear shortly after birth, or as late as the age of 2-3-4 years. Autism can also be associated with a limitation of cognitive functions, especially problem solving, abstraction and concept formation. Impaired cognitive functions may be related to understanding speech and problems with identifying non-verbal signals. [8, 205–220]. Children who have been diagnosed with ASD perceive their surroundings iconic, i.e. with very precise details [4, 205–209].

According to Lecht (2010), childhood autism is characterized by the so-called triad of impairments. It consists of:

1. qualitative impairment of reciprocal social interaction – it is manifested by lack of interest and inability to establish contacts and react in a normal way to social stimuli (e.g. the child does not react when (s)he hears his/her name, when someone comes into the room, has issues with personal space, talks at people rather than to them, has difficulties with understanding non-verbal language, social rules, hierarchy etc.);
2. qualitative impairment of communication skills – it is characterized by a lack of verbal and non-verbal production, speech expressions (repetition of words, use of invented words, incorrect use of pronouns, difficulty understanding jokes, sarcasm etc.);
3. limited, repetitive and stereotyped behavior patterns – they are a consequence of the desire for the environment permanence, and they are manifested, for example, by an extraordinary interest in spinning objects, the inability to play with toys, an interest in certain stimuli such as dripping water, flashing lights, etc. [6, 268–270].

Mostly, the big challenge in the school environment is repetitive behavior, as it disrupts the teaching process. It is a form of emotional self-regulation and it appears when the child gets into a situation

that is frustrating for him/her – usually situations involving a certain sensory stimuli (for example, a loud or high sound, flashing lights, noisy environment, crowded rooms). Repetitive behavior could also be triggered by circumstances that cause feelings of anxiety, stress, frustration, anger, unhappiness, or, on the contrary, joy and happiness or overload. Plans changes, discomfort (clothes, shoes, food), boredom, lack of interest can also be triggers. Repetitive behaviors could help the child to get through a given situation in which (s)he does not feel comfortable. It may include rocking, stepping, shifting from foot to foot, opening and closing doors, flicking light switches, snapping fingers, tapping on an object, spinning, repeating words, repeating phrases, blinking rapidly, covering and uncovering ears, etc. In some cases, it can even endanger the pupil's health, for example, if it involves biting nails, biting hands, scratching, hitting the head against the wall/table, hitting oneself, hitting one's ears. If such behavior is repeated too often, it can cause a deterioration of the behavior's self-regulation functions.

Some emotional reactions and personality features of a child with ASD, which affect music teaching, also appear in the intact population, but their intensity does not reach such dimensions, and children are able to better cope with them. According to a patient with Asperger's syndrome, the most significant characteristics affecting his violin lessons were (Autism and Violin lessons):

- Stubbornness – the student asserts his opinion, refuses to play at the given pace.
- Shyness – the student feels shame when playing in front of the teacher, (s)he is afraid that (s)he will make mistakes and that the teacher will laugh, or believe (s)he is not a good enough violinist.
- Anxieties before the lesson – appear in varying intensity from sweaty palms to cold hands and feet, or abdominal pain (these anxieties disappear after the teacher arrives in the classroom).
- Pessimism – the student does not believe in himself, especially with new playing techniques, (s)he has the impression that (s)he will not be able to master them, (s)he constantly repeats to himself that (s)he will not be able to play the technique. The teacher must remind him/her not to talk and to concentrate on mastering the technical problem through movement.

Asperger's syndrome is also associated with other typical manifestations, such as intense interests mainly in the technical direction (computers, cars, machines), but often linked also to music (playing drums, violin, piano).

The label could narrow the educator's perception, and therefore, (s)he might not consider the existence of a «double label». Such a teacher, being aware of the child's disorder, does not look for his special talent, which can be the child's second «gift». In music, it often manifests itself from early childhood. It can be:

- absolute hearing – the student is able to identify the pitch without the supporting tone, to identify the tones in a chord, to correct a wrong playing from the score, to identify the tonality of a piece without seeing the music score;
- phenomenal musical memory – the student can repeat simple melodies flawlessly, remembers pieces after the first/second hearing, rhythmically repeats even long sections accurately.

**3. Education of pupils with ASD.** When choosing an appropriate approach to a student with ASD, first of all, it is necessary to find out to what extent the diagnosis affects his/her cognitive functions and personality traits that are involved in performing activities. Each pupil, regardless of the «label», is a unique being and it is impossible to create a generally effective procedure and choose methods suitable for everyone. Labeling and generalization could jeopardize the unique approach to the student and limit sensitivity in perceiving and respecting his/her special needs.

Children with ASD must have the school environment and educational conditions adapted to their needs. Specific approaches can be divided into three groups [8, 221–223]:

- Cognitive approaches – they require modification of both the entire school and family environment. They assume a primary cognitive deficit, and therefore emphasize structured learning, individualized work with the child and cooperation between the school and the family.
- Motivationally and emotionally focused approaches – they are based on strengthening social motivation. Teachers and parents try to keep the child's relationships connected with positive emotions, especially with joy during joint activities. This

approach group includes, for example, interactive music therapy, in which a meaning is attributed to every action of the child and subsequently the parent/teacher tries to achieve a shared understanding that contributes to the communication improvement.

- Biological approaches – they are aimed at improving the quality of social adaptation using various dietary supplements, psychopharmaceuticals, diets, etc.

Furthermore, it is necessary for the teacher to be prepared for different situations, to be familiar with different symptoms, possible complications ... Especially when it comes to seizures and repetitive behavior, with which the student endangers his/her health (or the health of his/her classmates). In such cases, the teacher must intervene to prevent the student from self harming, but must not punish the student, as this could make the situation even worse. The teacher can show an awareness of the student's emotion (show that (s)he has noticed it) and ask a student why (s)he is unhappy, if everything is okay (for example: «It seems to me that something is bothering you. Is everything okay?»). Another option is to replace the dangerous behavior with another, safe one, such as playing with simulation toys (fidget spinner). The teacher should give the student the opportunity to choose the toy (s)he wants to play with. According to several experts, the possibility of regulating repetitive behavior is also long-term work with the child, such as consultations with an expert, therapy using applied behavioral analysis, reinforcement of the desired behavior with a reward, and increased physical activity. In an emergency situation in the classroom, the teacher should allow the student to perform repetitive behavior in another environment so as not to disturb others [1].

Every teacher should have a certain packet of procedures that could be beneficial for a student with ASD and should be aware that not every procedure will be effective in a particular situation. A patient and kind approach, constant testing and verifying the procedure effectiveness should be part of regular work with the student.

The educator could try to implement the following recommendations:

1. Adapt the environment to the student's special needs according to the proposal of the parent/psychologist.
2. Eliminate seizure triggers.
3. Assign precise tasks, especially in an illustrative way.
4. Use visualization, provide visual stimuli.
5. Give examples of specific situations, persons and their behavior.
6. Enable the student to communicate in a way specific to him.
7. Clearly structure space and time in the classroom.
8. Organize tasks in time, display the plan for their fulfillment using pictures on cards.
9. Familiarize the student with the number, duration and organization of tasks so that (s)he knows what to expect.
10. Use observational learning – teach the child to observe other children as they learn and repeat their procedures.
11. Enable the presence of a teaching assistant, if one is assigned to a student or if the school has one.
12. Respect the child's current mood.
13. Do not force the student into activities that (s)he does not want to perform.
14. Do not raise one;s voice at the student, instead, say critical remarks in a monotone voice.
15. Have a box of stimulating self-soothing/self-satisfying toys available.

**More recommendations for the music-artistic training of a pupil with ASD.** In order to avoid seizures and to make the learning process effective, in playing an instrument or singing lessons, teachers might try to:

1. eliminate fluorescent and bright lighting (can be a problem especially at concerts), avoid high dynamic sound levels, have a child play with hearing protectors (especially if the student is very sensitive to sounds, even when (s)he plays the violin, flute, piano, etc., not only when playing percussion instruments), play with a damper (with a sordina, with a choke, with a left pedal), notify the student in advance about the touch, if it is necessary;
2. make slow movements towards the pupil, avoid fast and jerky movements;

3. demonstrate correct play, point out differences and describe and model the method of correction, do not directly correct the student using touch, bring photos of proper instrument playing positions, thereby model proper habits, record the child during a correctly performed activity and share it with the parent so that (s)he can practice with the child at home, identify any special musical talent (absolute pitch) of the child, take advantage of the child's ability to play by ear and their absolute pitch (if the pupil has them), connect note names with the sound and not with the note symbol (Once the child gets familiar with the sound and names of the notes, the transition to sight reading is smoother.), focus on both visual and auditory ways of communication, involve multiple senses in teaching, use multisensory teaching methods such as tapping the rhythm, clapping the rhythm, visual aids, use visual aids such as flash cards, color markings at the instrument parts, color markings in the music sheet;
4. choose compositions that are interesting for the student and that (s)he already knows from movies, stories, etc., divide the tasks into the smallest possible partial tasks and describe them precisely, structure them and write/draw them on paper so that the student knows the exact algorithm for completing the task, prepare the structure of the lesson, make a visual aid with the structure, cover the drawing/description with laminate and let the child cross off the activities that have already been completed in the lesson, if interested, let the student determine the order of activities in the lesson and tick them off, when necessary, use breathing exercises to calm down and slow down – have a child take a breath after each measure, after each phrase, etc.

A specific problem in the music-artistic education of a pupil with ASD can be his preparation for performing in an ensemble. Jo Rudy (2020) recommends:

- Sit the student next to someone who will help him with instructions if necessary (turn the page, sit down, move on stage).
- Teach the student to observe the pauses between phrases (for example, by listening to a recording and playing along with it).

- Teach the entire process of moving on stage, including arrival, sitting down, unfolding and moving stands, bowing, leaving the stage).
- Assign a suitable place for the child (take into account his sensitivity to sounds/light).
- Rehearse with the child his/her part correctly from the very beginning, because correcting any mistakes can be a difficult process.

The music school teacher should communicate primarily with the parent, or with helping professions experts, such as psychologists, special educators, school counselors. It is the parents who have the most experience with their child, they know what is beneficial for him/her, which procedures and methods have a positive effect on him/her and what, on the contrary, needs to be avoided. The first interview with the parent should take place in the teacher's classroom so that the parent can «check» the classroom, draw attention to objects that could be disruptive and suggest an arrangement that, on the contrary, suits the child. The teacher should then remove all seizure triggers and create a space for calming down (personal corner).

**Conclusion.** When teaching a student with ASD, it is always necessary to follow specific procedures, and to have a specific approach to the student that reflects the degree of severity of ASD symptoms. The teacher must understand the fact that autism spectrum disorders can have very different degrees and that some children can behave and perform within the norm, or above it, and adapt to the conditions of music education to the extent that they perform well, but other children can't. The teacher should always review the student's specific needs, familiarize himself/herself with his/her diagnosis and, after consultation with the parents, modify his/her own approach to the student in order to lead him to success in music performance.

### ***References.***

1. ABA psychological services. How to manage Stimming Behaviors in Autism. ABA Psychological service, p.c. April 25, 2022. Upl: <https://abapsychologicalservices.com/blog/How-To-Manage-Stimming.html>



2. Autism and Violin lessons, December 2012.  
Upl: <https://www.violinist.com/blog/bottlelyd/201212/14245/>
3. Cigánková V. Metodika integrace dětí s poruchami autistického spektra do mateřských škol doplněná odbornou analýzu Přemysla Mikoláše. *Methodology for the integration of children with autism spectrum disorders into kindergartens supplemented by the expert analysis by Přemysl Mikoláš*. Ostrava: Montanex, a.s., 2016.
4. Heretik A., Heretik A. Jr. et al. Klinická psychológia. *Clinical psychology*. Nové Zámky: PSYCHOPROF, spol. s r.o., 2007.
5. Jo Rudy, Lisa. Tips for Tips for Teaching Instrumental Music to People With Autism, April 05, 2020.  
Upl: <https://www.verywellhealth.com/tips-for-teaching-music-to-people-with-autism-260391>
6. Lechta, V. (Ed). Základy inkluzivní pedagogiky. Dítě s postižením, narušením a ohrožením ve škole. *Basics of inclusive pedagogy. A child with disabilities, impairments and threats at school*. Praha: Portál s.r.o., 2010.
7. Mikerová, A. Využitie metódy vizualizácie v edukácii žiaka s autizmom; Osvedčená pedagogická skúsenosť edukačnej praxe. *Use of the visualization method in the education of a pupil with autism; Proven pedagogical experience of educational practice*. Bratislava – Prešov: Metodicko-pedagogické centrum, 2015.  
Upl: [https://mpc-edu.sk/sites/default/files/projekty/vystup/14\\_ops\\_mikerova\\_ev\\_a\\_vyuzitie\\_metody\\_vizualizacie\\_v\\_educacii\\_ziaka\\_s\\_autizmom.pdf](https://mpc-edu.sk/sites/default/files/projekty/vystup/14_ops_mikerova_ev_a_vyuzitie_metody_vizualizacie_v_educacii_ziaka_s_autizmom.pdf)
8. Říčan P., Krejčířová D. a kol. Dětská klinická psychologie. *Child Clinical Psychology*. 4. přepracované a doplněné vydání. Praha: Grada Publishing, 2006.
9. Strenáčiková M. 50 otázok učiteľov základných umeleckých škôl a konzervatórií; Kľúč k pedagogicko-psychologickej príprave učiteľov v profesionálnej umeleckej edukácii. *50 questions from teachers of elementary art schools and conservatories; Key to pedagogical-psychological training of teachers in professional art education*. Košice: Equilibria, s.r.o., 2021.
10. Šedibová A., Vladová K. Autismus a další pervazivní vývojové poruchy. *Autism and other pervasive developmental disorders*. In

Lechta V. (Ed.) Základy inkluzivní pedagogiky. Dítě s postižením, narušením a ohrožením ve škole. Praha: Portál, 2010. Pp. 267–270.

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**ІНТЕРНЕТ-СЕРВІСИ МУЛЬТИМЕДІЙНИХ ДИДАКТИЧНИХ  
ВПРАВ З КУРСУ «ТЕОРІЯ МУЗИКИ»:  
ОГЛЯД ТЕСТОВИХ ОН-ЛАЙН КОНСТРУКТОРІВ**

Інноваційні процеси, що відбуваються в наш час у сфері освіти містять в собі виклики сучасності, що пов'язані з переходом людства на інший етап розвитку. Сучасні наукові дослідження, систематично звертаються до проблем музичної педагогіки, наголошуючи, що інноваційні зміни в музичній педагогіці повинні охоплювати всі ланки музичної освіти – від початкового музичного навчання до вищої професійної музичної освіти.

Впровадження сучасних інформаційно-комунікативних технологій навчання в освітнє середовище є достатньо важливим. В даний час вже сформувалася нова перспективна предметна галузь «Інформаційні технології в освіті». Новітні технології пов'язані із застосуванням електронних засобів навчання й використанням комп'ютера та Інтернету. Слід зауважити, інноваційні для музичної освіти технології не являють собою повне заміщення традиційно новим, а лише оновлюють його. Адже, саме слово Інновація в дослівному перекладі з латинської мови означає оновлення.

Використання цифрового контенту має деякі переваги для самостійної роботи студентів. Науковці звертають увагу на те, що Інформаційно-комунікативні технології суттєво активізують самостійну пізнавальну діяльність дослідників, тим самим можуть сприяти досягненню високого ступеня інтерактивності й необхідного рівня якості знань студентів. Однак, застосування комп'ютерних технологій при вивченні музично-теоретичних дисциплін і досі є суперечливим питанням. Музична професійна