

DISABLED CHILDREN AND EDUCATION FOR SUSTAINABLE DEVELOPMENT

Bufalova M.A., Savvateeva O.A.

State budgetary institution of higher education of the Moscow region «University «Dubna» (Dubna State University), Dubna, e-mail: bufalova99@mail.ru, ol_savvateeva@mail.ru

Modern education should be accessible to all categories of students. This article discusses the problem of education for sustainable development of children with disabilities. Among the most common violations of children's health, one can name disorders of psychophysical, speech, hearing, vision and musculoskeletal system, and they are considered by the authors. Children with disabilities are, first of all, young members of society who have the same needs as all other people around them. They should lead a life that is as close as possible to the life of a normal child, be able to learn in a favorable environment for them with the prospect of increasing the effectiveness of learning outcomes. Opportunities for education in children with disabilities are often not lower than ordinary children, but most often they require a special approach and selection of teaching and upbringing methods. The field of education for sustainable development and the natural sciences is very favorable for all children, and health features are unlikely to be an obstacle to the growth of knowledge, skills and abilities among the younger generation.

Keywords: environmental education, teaching of children, health development features, visual impairment, hearing impairment, musculoskeletal system dysfunction

Any person who has a defect in physical development can, under appropriate conditions, become a full-fledged person, develop spiritually and be able to provide for himself independently. A child with health problems is a special person who needs a special approach. Education for sustainable development is one of the blocks of general education, it cannot be an exception in the approaches to its implementation, this is an urgent requirement of today for every person, regardless of his physical condition. When planning upbringing, training and education programs in the field of sustainable development, it is very important to take into account the types of physiological disorders in the development of children and apply appropriate methods and approaches that will greatly increase the effectiveness of the process and its results [1, 2].

The **aim** of this work is to analyse the main types of physical health disorders of children in order to identify key aspects in planning education activities for sustainable development.

The basic **methods and materials** in the preparation of work are a descriptive method, which includes the study of various sources of information; a theoretical method that includes analysis, synthesis and generalization of materials; as well as the results of the authors' practice in 2017-2020, obtained during work with children of different age groups in pre-school educational institutions and secondary schools in Dubna, Moscow region, in the process of conducting classes and science lessons.

Research results and discussion

Modern education should be accessible to all categories of students [3, 4].

A teacher/teacher should not think that he is working with "limited" children.

– psychophysical infantilism (immaturity of the emotional-volition sphere);
– speech disorders (primarily severe);
– visual impairment
– hearing impairment
– impairment of musculoskeletal functions (ODA);
– Down's syndrome.

This paper will look at these groups of violations and approaches to working with children suffering from them [2, 5].

Mental features of children with immaturity of the emotional-volition sphere. Emotional-willed sphere is the properties of a person that characterize the content, quality and dynamics of his emotions and feelings.

Disruption of the emotional-volition sphere is manifested in the increase in emotional excitability, hyperesthesia, increased exhaustion of the nervous system. Younger children may also have disturbed sleep. Such excitability can occur under the influence of tactile, auditory and visual stimuli. Children with emotional and volitional disorders have frequent manifestations of emotions such as anxiety, anxiety, perceived, impressionability and a large number of fears. Such children may experience low self-esteem, as they expect a negative attitude from others. When working with such children, it is important to adjust their self-esteem and create conditions in which the child will not feel pressure. When conducting classes it is desirable to spend with the child games and exercises in which he can draw. It is important to create situations in which the child will be able to cultivate their strong-willed qualities, preferably to use game forms [6].

Currently, the number of children with similar violations is increasing every year. Most likely, the rapid digitization of society,

the growing employment of adults in families, physical factors of the environment and so on have a negative impact here. In conducting classes on natural science, we often use visual methods and techniques, especially for the reflection of preschool children. However, these methods can be considered justified for virtually any age.

Mental features of children with speech impairments. Speech function is directly related to the formation of higher mental functions.

If a child has a lack of visual perception, he has a scant understanding of the world around him and a slow perception of words. It is best for such children to work in private so that they are not distracted.

Phonemastic hearing disorders often have a high degree of sensitivity to different sounds. These children may not even understand their own name. There are times when the child understands the words, but is lost and can not understand them in sentences. It is important for the teacher to explain the material using simple words, simple sentences. It is also necessary to find out from parents how they communicate with the child, and to build classes in a similar way [7].

Psychological features of visually impaired children. Vision is the most powerful source of information about the outside world: through it a person receives up to 90% of information.

It is important to understand that the behavior of a child with visual impairment is very different from the behavior of children with typical developmental disabilities. The American psychologist Robert Plutchik believed that people with vision problems should use protection mechanisms more than ordinary people when conflicts arise. But studies have shown that everything is exactly the opposite: children with visual impairments are more adapted to the social environment.

In these children, involuntarily impaired attention, they can constantly switch their attention to different activities or vice versa, have a low level of attention switching. Also, they are characterized by rapid forgetting of the learned material, so it is necessary to repeat the passed material. In addition, these children are physically unable to memorize large amounts of information, so it is recommended to hold environmental classes lasting 15-20 minutes [1, 8, 9, 10].

Large font and color pictures should be used in presentation materials, as color provides additional information to the shape of the images. To work more effectively with children with such impairments, it is better to use

additional lighting to better see the device on which the material is presented and the items used in the class. Writing assignments should be given more time than you would with ordinary children.

Psychological features of children with hearing impairments. There are two groups with this violation: hard of hearing and inaudible people.

Children with hearing impairments have a peculiar perception of people and the development of attention. Having this violation, people from childhood learn to know the world through vision. That's why you need to use as many visual images as possible when learning. When explaining should make small pauses between sentences and questions, speak slowly and clearly. Presentations recommend duplicating speech and using credits in videos. For such children, tactile, tactile sensations are important, so you should use as much visual and illustrative material as possible. Such children are often closed in themselves, it is difficult for them to communicate with other people, so the teacher needs to be in a good mood and demonstrate benevolence. Visual contact is extremely important when talking. When using game forms, it is important to take into account that children with hearing impairment have reduced feelings of spatial orientation, so you should not play too mobile games (to avoid injury) [1, 4, 11, 12].

Psychological features of people with impaired musculoskeletal function (ODA). In musculoskeletal disorders, children with these disorders may have difficulty manipulative activities and writing. They are characterized by specific abnormalities in mental development, such as impaired active work attention.

Children with ODA disabilities need to create an individual curriculum or study in small groups, taking into account the views of parents and other educators. Sharp movements can cause spasms of different nature, so you should avoid sharp external influences. These children often perform tasks slower than normal children, so games for time and with a competitive component are not always suitable. However, it should be noted that children with ADA disorders may have the most significant differences within their morbidity group from all the physiological abnormalities considered [1, 7, 13].

Psychological features of people with Down syndrome. Down syndrome is a form of genomic pathology. With her, usually the karyotype is represented not by 46 chromosomes, as usual, but by 47. Unfortunately, this

pathology is frequent. The external manifestations of Down syndrome are maxillofacial disorders, dysplastic changes in the skeleton, hypotension, and visual disturbances. Typical developmental features also include impaired perception sensors, delayed motor development, specific thinking patterns, and profound speech underdevelopment. In general, we can say that teaching such children in schools is very difficult. The main problems in training are the following features:

1. imagination. Children can perceive images only visually, it does not appear in their heads. Children are able to correlate parts of a drawing and, however, cannot combine them into a whole image;

2. behavior. The behavior of children with this syndrome is obedient, even a little willing to obey. However, their mood changes rapidly, from lethargic to excited. Various behavioral disorders can also occur;

3. emotions. For children with Down syndrome, basic emotions such as fear, joy, sadness, fear are noted, but complex emotions such as surprise or embarrassment are absent and are difficult to recognize even in other people. They do not know how to envy, be angry for a long time, take revenge. Both adults and children with Down syndrome know how to be happy, they are created that way;

4. personality. Children with Down syndrome are characterized by imitativeness and suggestibility. Some children show qualities such as self-centeredness or excessive accuracy. Due to the fact that these children are emotional, communicative, they can be helped if they are persistently and kindly dealt with.

It is important to remember that "syndrome" and "disease" are different things. Children with this syndrome need competent psychological and pedagogical correction and are quite amenable to it. But it is necessary to start the correction as early as possible. In other words, children with Down syndrome can develop and study normally in a regular school, but specialists must prepare them for this.

Distance learning and children with disabilities. In connection with the current epidemiological situation, it is necessary to answer the question whether children with disabilities can engage in distance learning.

Doing tasks with your child at home, it is important to remember that his attention quickly switches and he can not sit for a long time on one case. Every 15-20 minutes it is necessary to carry out charging, small games, make changes. It is necessary to recreate as much as possible for the child school everyday life, that

he did not feel additional stress and pressure. It is also necessary to understand that a child with a disability will not quickly assimilate the material and move forward. Lessons with him at home is better to build so that the child more repeats after the parent, was able to touch objects. In other words, it is necessary to fix the heard material tactilely and visually.

Distance learning and children with disabilities. In view of the current epidemiological situation, the question of whether children with disabilities can be engaged in distance learning needs to be answered. Most children with disabilities do not have this work regimen because they cannot work at the same speed as other children. Also, in such children it is very important in learning live communication, without which the child is lost and can not concentrate. Therefore, during the quarantine period, parents have a very serious responsibility. They will have to act as not only a parent, but a teacher and a friend.

Doing tasks with your child at home, it is important to remember that his attention quickly switches and he can not sit for a long time on one case. Every 15-20 minutes it is necessary to carry out charging, small games, make changes. It is necessary to recreate as much as possible for the child school everyday life, that he did not feel additional stress and pressure. It is also necessary to understand that a child with a disability will not quickly assimilate the material and move forward. Lessons with him at home is better to build so that the child more repeats after the parent, was able to touch objects. In other words, it is necessary to fix the heard material tactilely and visually.

Games for children with disabilities. The game is a very important part of the life of not only the child, but also the adult. Therefore, it is worth resorting to game methods of teaching children with disabilities.

For children of preschool age, the game "zoo" is perfect. It will help not only to learn animals, but also to develop imagination, correct emotional isolation and help the child to be liberated in movements. The essence of the game: the presenter stands in front of a group of children or a child, mentally puzzles the animal and begins to show it, repeating the characteristic movements for him. Once the child guesses, he becomes the leader and will show the animal.

Another interesting game is called "Reincarnation." It is aimed at developing creative thinking, unincoalized movements and can carry a wonderful educational character. The essence of the game: the child is offered to re-

incarnate in some animal or swap roles with someone, for example, to become a mother and lose this role. After playing the role, it is necessary to discuss with the child what he felt, why he behaved like that, whether he liked it, etc.

A game designed to teach a child to get out of conflict situations is called "What are you going to do?". The essence of the game: the presenter comes up with life situations and asks the child what he would do and why. This will help not only teach the child how to act, but also help explain what is good and what is bad. It is better to play such a game individually.

To develop tactile memory, you can play with your child in the game "Guess what the object is." The essence of the game is that the presenter puts in a bag a lot of items. The child should put his hand in the bag, grope one object, describe it and try to guess what it is. If the child is shy, you can help him by asking questions about the shape, structure, size.

These games can be used in between activities or just in everyday life.

Also, for children with health features for normal learning, it is important what kind of environment surrounds them both at home and outside. If the child is stressed, it can aggravate his condition. Therefore, it is important for parents to try to always be friendly, support the child and communicate with him. It is important that the child grows up in a comfortable environment for him and does not experience psychological pressure. Since for such children, any changes can also cause stress and anxiety, it is important to talk with the child about plans not only for the week, but also for the troubled ones. Psychologists have proven that children who feel support and understanding from their parents deal with stress more easily.

Conclusion

Despite some limitations in approaches and methods to engage in sustainable development classes, children with disabilities tend to respond very positively to environmental aspects, absorb knowledge and engage in the mysteries and beauty of nature. In addition, classes of natural science orientation help to develop intelligence, aesthetic taste and creativity, in the presence of motor forms of

training (even small intensity and amplitude) strengthen health, increase self-esteem, promote personality, determination of the life perspective of a small person.

References

1. Mzhavanadze N.S. Psychological and Educational Support for Children with Disabilities and Disabilities. / Guidelines. Syktyvkar, 2013. 90 p.
2. Soldiers D.V., Soldatov S.V. Psychological and Educational Support for Inclusive Vocational Education of Disabled people and persons with HIA / Problems of modern pedagogical education. 2018. No 59-2. P. 466-470.
3. Bondar T.A., Dimenstein R.P., I.Y., Konstantinova I.S., Posezelskaya M.A., Yaremchuk M.V. Preparing children with special needs to study in school / Educational policy. 2010. No11-12 (49).
4. The website of Russia's Leading Educational Portal Infourok / Additional Education Program for Children with Disabilities in the Eco-Biological Direction. "Electronic resource." URL: <https://infourok.ru/programma-dopolnitelnogo-obrazovaniya-dlya-detey-s-ogranichenimi-vozmozhnostyami-zdorovya-po-ekologo-biologicheskomu-napravleniyu-1818014.html> (address date: 15.12.20).
5. Taranets I.P. Educational program on soil organisms for people with disabilities / Role of soils in the biosphere and human life: International Scientific Conference: To the 100th anniversary of the birth of Academician G.V. Dobrovolskiy, to the International Soil Day. M.: Moscow State University named after M.V. Lomonosov, 2015.
6. Avdonina T.B., Guryeva D.H. Innovative methods of teaching children with disabilities / Archivist – 2020. No3 (48). P. 46-51.
7. Department of Education and Science of Moscow. Psychological features of children with severe speech disorders (TNR). – 2020. URL: https://sch514u.mskobr.ru/dou_edu/zdanie_4/obrazovanie/logopedicheskaya_sluzhba/psihologicheskie_osobennosti_detey_s_tyazhelyimi_naruseniyami_rechi_tnr/ (address date: 23.12.2020).
8. Karaush I.S., Dashieva B.A., Kupriyanova I.E., Stoyanova I.Y. Features psychological diagnosis of children with sensory disorders / SSW. 2014. № 51. P. 132-138.
9. Kruzhkov O.V., Shakhmatov O.N. Psychological Protection of the Person. Ekaterinburg: Russian State Profile and Educational University 2006. 153 p.
10. Lebedev A.P., Reunova A.A., Sevastyanov U.Y., Kuftak E.V. Adaptation Mechanisms in Children with Disabilities / Journal of Kostroma State University. 2017. № 2. P. 169-173.
11. Adapted program for children with HIA. / Website of the Corporation "Russian Textbook" / Articles / Psychology and Pedagogy. URL: <https://rosuchebnik.ru/material/adaptirovannaya-programma-dlya-detey-s-ovz/> (datat appeal: 20.12.20).
12. Bubareva V.E. Problems of psychological readiness for schooling of children with hearing impairments // KemSU Herald. 2014. № 3 (59). P. 118-122.
13. Gimatova R.A. Specificity of corrective work with children in the emotionally – strong-willed sphere / Materials VI of the International Student Scientific Conference "Student Scientific Forum" URL: <https://scienceforum.ru/2014/article/2014002116> (address date: 05.01.2021).