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MODERN APPROACHES TO TEACHING COMMUNICATION SKILLS TO CHILDREN WITH SPECIAL PSYCHOPHYSICAL DEVELOPMENT AND VERBAL COMMUNICATION DISORDERS

Abstract. Most children with special psychophysical development are characterized by a significant underdevelopment of speech or its complete absence. This leads to difficulties in communication, the presence of undifferentiated and socially unacceptable communicative signals, interpretation of which is possible in specific situations and only if closely observed by the surrounding people. As a result, social adaptation and integration of children into society of typically developing people becomes more difficult, and the quality of life of these children deteriorates. Globally, supportive and alternative communication is widely used with reference to children with special psychophysical development and verbal communication disorders. Consequently, acquisition of knowledge and skills in the field of teaching augmentative and alternative communication skills should become one of the constituents of the professional competence of a modern teacher-defectologist. The article deals with the problem of teaching communication skills to children with special psychophysical development and verbal communication disorders, in particular children with severe and/or multiple developmental disorders. The article defines the importance of supportive and alternative communication as a means of improving the quality of life of children with severe and/or multiple developmental disorders. The article describes the approaches to diagnosing the level of development of communicative behavior of children. It presents the requirements to the design of an individual program of teaching supportive and alternative communication. The article describes the principles of formulating the topics of the classes (lessons) devoted to teaching supportive and alternative communication. The author describes the approximate structure of combined lessons of

teaching communication to children with severe and/or multiple developmental disorders.

Keywords: supportive communication; alternative communication; children with impairment of psychophysical development; children's communication; children's speech; speech development; non-verbal communication; means of non-verbal communication.

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Introduction. According to statistical data, the number of children with special psychophysical development, and specifically with severe and/or multiple developmental disorders has been rapidly growing over recent years both in Belarus and in other countries.

The majority of such children demonstrate significant impairments of the verbal communication skills. Their communicative signals are hard to interpret and quite often socially unacceptable. Suffering from lack of understanding and being constantly rejected by the surrounding people, such children become unpredictable, unbalanced, whimsical, aggressive, and socially and psychologically lonely. In most cases, social contacts with children with severe and/or multiple developmental disorders are limited to satisfaction of their vitally important needs: the child is fed, given water to drink, has their clothes

changed, is taken for a walk, helped to change the position of the body, perform hygiene procedures, etc. As a consequence, the surrounding people deprive such children of an opportunity to make even the slightest choice, infringe on their rights to express their needs, physical and psychological state, etc. [7; 9; 11; 14].

Practical experience and analysis of psycho-pedagogical research show that the traditional methods of speech and communication skills formation used in rehabilitation work for concrete nosology are not effective enough with reference to the majority of children with severe and/or multiple developmental disorders [7; 9; 11; 13; 14]. In this connection, the search for new ways in the sphere of education of the children with various combinations of developmental disorders and provision of an accessible system of communication becomes especially urgent.

Research. In 2016, the Republic of Belarus ratified the UN Convention on the Rights of Persons with Disabilities adopted by the UN General Assembly Resolution 61/106 on 13 December 2006 (*hereinafter*: the Convention) [4]. In accordance with the National Plan of action on the realization of the Convention provisions for 2017-2025, our country is to realize its prescriptions by taking corresponding measures [8].

Under Article 21 of the Convention “Freedom of expression and opinion, and access to information” the states parties are to accept and facilitate “the use of sign languages, Braille, augmentative and alternative communication, and all other accessible means, modes and formats of communication of their choice by persons with disabilities in official interactions”. In accordance with Article 24 “Education”, the states parties “shall enable persons with disabilities to learn life and social development skills to facilitate their full and equal participation in education and as members of the community”. “To this end, the States Parties shall take appropriate measures, including ... facilitating the learning of Braille, alternative script, augmentative and alternative modes, means and formats of communication and orientation and mobility skills, and facilitating peer support and mentoring” [4].

Globally, methods and technologies of teaching augmentative and alternative communication are widely used with reference to children with severe and/or multiple developmental disorders with the purpose of improving the quality of their life and creating the conditions for proper interaction with the surrounding people in accordance with their abilities [10; 13].

Analysis of home and foreign research shows the diversity of interpretations of the notion “augmentative and alternative communication”.

The American Speech–Language–Hearing Association (ASHA) defines augmentative and alternative communication as “the sphere of research in clinical and educational practice including attempts to teach and (if necessary) to compensate for temporal or permanent limitations of life activity of persons with severe impairments of expressive and/or impressive speech” [3].

According to the German pedagogue S. Rabe, augmentative and alternative communications are different kinds of pedagogical and therapeutic assistance provided for persons with absence or serious impairments of oral speech with the purpose of optimization of their communicative abilities [6].

Psycho-pedagogical literature contains other definitions of the term “augmentative and alternative communication”:

- a communication method other than speech;
- a group of procedures and processes ensuring effective communication;
- a number of tools and strategies application of which resolves everyday communication problems;
- a communication method complementing the traditional methods of teaching oral and written speech in case of their impairment;
- support for or substitution of oral and/or written speech;
- methods of communication serving as an addition or alternative to oral speech and including gestures, picture communication symbols, alphabet, and computers with speech synthesizers [3; 13].

According to L. S. Vygotskiy's theory of cultural-historical development of personality, augmentative and alternative communication is a specially created cultural auxiliary system facilitating normalization of communication of the so-called "persons without language" [1].

Thus, analysis of various interpretations of the notion shows that the non-verbal character, provision of speech support or alternative, and improvement of communication effectiveness are the common and significant features essential for the definition of augmentative and alternative communication.

It is necessary to differentiate the notions "augmentative communication" and "alternative commu-

nication". Thus, augmentative communication is needed by persons with severe and/or multiple developmental disorders who demonstrate oral speech underdevelopment. As a result of this, they need the corresponding additional support in oral communication. Alternative communication is resorted to when the person is absolutely unable to communicate with the help of oral speech. In this case, it is necessary to teach the person to use a completely different system of communication [6].

Teaching augmentative and alternative communication presupposes the use of a wide range of non-verbal means.

In her writings, T. V. Gorudko classifies the means of augmentative and alternative communication, dividing them into technical and non-technical devices.

According to T. V. Gorudko, non-technical devices comprise object- and picture-based calendars, communicative maps, boards, tables, books and eye-gaze frames to indicate choices, which support expressive communication of the children with the help of tactile and graphical symbols.

Technical communication devices have oral or written information output. The author refers here devices for playback of separate utterances, devices for playback of several utterances, devices with dynamic display, devices for order-

ing images, and devices for converting written speech to oral one [2; 3].

K. M. Stas'ko reports that the augmentative and alternative communication means may be represented by two groups: low-tech devices (communicative books, maps, cards, passports, visual timetable, E-Tran frames), and high-tech devices (computers and tablets with special software installed, glance operated devices (EyeGaze systems), VOCAs devices with different sets of words) [3].

We believe that the augmentative and alternative communication means may be provisionally divided into two groups. The first group is made up of non-verbal means typical of any person: vegetative base responses (perspiration, salivation, skin redness, blue nails, tears, etc.), facial expressions, body movements and gestures, look. The second group includes auxiliary means of communication: tactile symbols (real objects, their parts, miniature copies, etc.), graphic symbols (photos, pictograms, picture communication symbols, bliss-symbols, loeb-symbols, rebus-symbols, etc.), and technical devices ("buttons", "talking" photo albums, "Super Talkers", "Go Talk", tablets adapted for communication, etc.) [11; 12].

Practical pedagogical work and scientific research outcomes show that it is possible to single out three groups of augmentative and alternative communication users.

The first group comprises people who understand speech addressed to them, but due to certain limitations cannot use oral speech as a means of communication. For example, here belong persons with the locomotion functions disorders, who can pronounce only separate sounds as a result of articulation and facial muscles innervation impairment. In this case, non-verbal means of communication serve as alternative expressive means.

The second group is composed of persons who understand speech addressed to them, more often in a contextual situation, but their own oral speech is comprehensible only with the help of additional means, such as gestures or graphic images. In this case, non-verbal means of communication function as support for both impressive and expressive speech.

Persons incapable of using oral speech as a means of communication make up the third group. This group more often includes children with severe and/or multiple developmental disorders. For them, non-verbal means of communication serve as an alternative to both expressive and impressive speech [3; 6].

It should be noted that people with one and the same nosology may be included in any of the three groups. This fact testifies to the necessity to realize individual differential approach to teaching aug-

mentative and alternative communication.

Selection of the means of augmentative or alternative communication adequate to the child with severe and/or multiple developmental disorders' needs and abilities, as well as the strategies and tactics of teaching depends on the quality of the psycho-pedagogical examination of the level of development of the communicative behavior of the child.

Two approaches to the organization of testing of the level of development of the communicative behavior of children with verbal communication skill impairments are singled out.

The ontogenetic approach is aimed at the study and assessment of the child's communicative skills at certain stages of speech development in accordance with the children's speech ontogenesis, acquisition of communication forms, etc.

The environmental approach focuses on the study of the child's social interaction and the nature of their functioning in the environment. Assessment of the level of development of the communicative behavior in accordance with this approach presupposes the study of environments and sub-environments of the child's life activity and constitutes the following sequence of actions:

- meetings of the team of specialists and the child's legal representatives during which they discuss the

anamnestic data and the experience of the child's interaction with close people, peers, etc.;

- study of the child's behavior in the typical environments and sub-environments (flat, playground, etc.);

- analysis of the child's actions performed in the typical environments and sub-environments;

- distribution of actions by their significance (hierarchy from more significant to less significant ones);

- determination of the potential environments and sub-environments;

- composition of a "communicative portrait" of the child;

- planning work (design of an individual learning program) towards the child's preparation for maximum independence in everyday life, including communicative interaction (choice of a communicative partner and assistant, selection of the means of augmentative or alternative communication, fixing the time and place of the initial stage of teaching communication, design of individual communicative supports, etc.) [3].

Planning work on teaching children with severe and/or multiple developmental disorders augmentative and alternative communication is a long enough and tedious process characterized by the following distinctive features.

Firstly, the individual program of teaching augmentative and alter-

native communication is made up and realized by all subjects of the psycho-pedagogical support functioning as acting and potential communication partners.

Secondly, the communicative needs of the user of augmentative and alternative communication may change, their social contacts may widen, and new topics and situations of dialogic interaction may spring up in the course of training. In this connection, the goal, tasks and content of work will be made more concrete and adjusted. That is why planning work on teaching augmentative and alternative communication should be short-term (for about 3 months).

Thirdly, realization of the individual program of teaching augmentative and alternative communication does not presuppose strict regulation in formulation and study of topics.

Teaching augmentative and alternative communication to preschool children with severe and/or multiple developmental disorders is carried out in the form of a group session, and to schoolchildren – in the form of a lesson. If a child with verbal communication skills impairment goes to a mainstream school (a group of integrated learning and upbringing, or an inclusive group) teaching communication should be realized at rehabilitation lessons, and reinforcement – in the

process of performance of everyday routine procedures.

Various formulations of the topic of the session (lesson) on teaching augmentative and alternative communication are possible. Let us give some examples.

Variant 1. The topic “Fruit”. In the course of the session (lesson) the teacher-defectologist should figure out such activity content that would allow solving the communication problems, but not the problems of actualization of the children’s knowledge about various fruits, their form, color, etc.

Variant 2. The topic “Walk”. At the given session (lesson), the teacher develops and reinforces the skills to conduct and carry on dialogue, and to use certain communicative habits and skills in the process of interaction with the pedagogue and other children during a walk.

Variant 3. The topic “Picture-Symbol ‘I am hungry’”. In this case, a non-verbal means of communication is chosen as the topic of the session (lesson). In the course of the session (lesson), a new symbol is introduced; in this case it is “I am hungry”. The vocabulary of images is thus expanded.

Variant 4. The topic “Request”. The topic formulation presupposes the formation or reinforcement of a certain communicative function, which determines the practical orientation of the session (lesson).

Variant 5. The topic “Gesture ‘Constructor’. Choice”. In the course of the session (lesson) the teacher-defectologist realizes the activity content aimed at reinforcement of a concrete means of communication in the child’s “vocabulary” and formation or perfection of the skill to interact with the surrounding people, and specifically to choose the needed thing [3].

Depending on what topic formulation principle is used by the pedagogue, what problems they are going to solve at the session (lesson), it is possible to single out the following forms of organization of teaching augmentative and alternative communication to children with severe and/or multiple developmental disorders: diagnostic session (lesson), session (lesson) – acquaintance with communication means, session (lesson) – training, session (lesson) – dialogue, combined session (lesson).

The scheme suggested by T. V. Liovskaia [5; 7] is used in Belarus to work out the structure and the content of combined sessions (lessons) of teaching augmentative and alternative communication to children with severe and/or multiple developmental disorders. Here is a modified variant of the session (lesson) scheme.

Stage 1 “Greeting”.

Aims:

– formation of the skill to greet other people with the help of non-verbal means;

– formation of the skill to establish positive interaction.

Stage 2 “Imitation”.

Aim: formation of the skill to perform actions imitating the actions of an adult.

Stage 3 “Formation”.

Aim: presentation of the non-verbal means of communication.

Stage 4 “We communicate”.

Aims:

– formation of the skill to comprehend non-verbal messages of the surrounding people;

– formation of the skill to express one’s wishes with the help of non-verbal means of communication.

Stage 5 “Leave-taking”.

Aim: formation of the skill to say good bye with the help of non-verbal means.

Conclusion. Thus, in order to prepare children with special psycho-physical development and disorders of verbal communication skills, including children with severe and/or multiple developmental disorders, for life with maximum independence, and to create the conditions for realization of their rights to information access and expression of their needs, wishes and thoughts, it is necessary to create the conditions for their acquisition of an accessible system of communication. For the majority of such children, augmentative and alternative communication is the basic, and often the only form of communication possible.

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