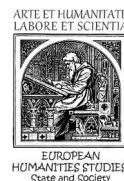


www.ehs-ss.pl

Andrey Savytsky

To the problem of individualization in education of children with Down syndrome

The problem of individualization of primary education is one of the most actual problems in modern comprehensive school reform. She focused on the humanization of educational processes and is based on the requirements which are expressed in the principles of individualization and differentiation in education. That means to take into account individual and typological peculiarities of students.

In the reformation of the education system based on person-centered learning scientists pay special attention to the individualization and differentiation of education in primary classes, because during this period differences in the development of the students are most noticeable, and it serves as a basis for further training and education.

Especially in this situation individualization in education of primary school children with Down syndrome reveals in the circumstances of comprehensive system of education. The process of teaching children with this genetic pathology is less studied and requires further researches.

The problem of teaching children with peculiarities of psychophysical development at the present stage involved experts in the field of correctional

pedagogy (V. Bondar, Y. Briskin, T. Gavrilova, O. Globa, B. Lipa, V. Sinov, E. Sobotovich, N. Stadnenko, V. Tarasun, M. Sheremet).

Because of the difficulty of the nature of Down syndrome, ambiguity manifestation of difficulties in education and searching ways to organize pedagogical support for children with this disease, maintenance carried out by specialists of related disciplines: psychology (Y. Gilbuh, I. Kulagina, N. Menchinskaya), defectology (T. Vlasova, K. Lebedinskaya, V. Lubovsky, M. Pevzner), general pedagogy (G. Kumarina, E. Rabunsky, V. Tsetlin), neuropsychology (N. Korsakova, I. Markovaya, Y. Mikadze Yu), physiology (M. Bezrukikh, S. Efimov).

Psycho-pedagogical foundations of individualization have been covered in the works of A. Kirsanov, G. Kumarina, E. Rabunsky, I. Unt.

The problem of individualization in learning as the problem of general didactics occurred a long time ago and has its own history of development connected with the names of many prominent scientists. The origins of the studying of this problem refer to the ancient times, to the first attempts to study students's individually-typological peculiarities. But scientific and theoretical understanding of this problem started recently, caused by popularities of mass forms of learning. [2, p.29]

The individualization and differentiation in teaching have been declared as the main principles in comprehensive schools in the concept of general education. In the modern school education pedagogical technologies, based on these principles, are considered by scientists (V. Bondar, V. Volod'ko, M. Golovko, L. Lipova, L. Momot etc.) among the most promising technologies.

The official approval of the principles of individualization and differentiation as the leading principles of educational institutions requires deep comprehension and further development of problem of individualization and differentiation in teaching at a higher theoretical level. The studying of the peculiarities of teaching children with psychomotor developmental disorders, in this case, children with Down syndrome acquires particular importance. [4]

For better understanding of those reasons which underlie problems of teaching children with this genetic disease we shall discuss the main features of their psychomotor profile. In the organization of correctional individualized teaching of children we need to take to account risk factors that underlie the peculiarities of their development. Namely:

- children ascertained hearing loss that is often a problem of perception of the speech of others;
- vision problems do not allow children to view full articulation of

adults and inherit it;

- low tone, disturbances of tactile sensitivity do not allow children to make kinesthetic control the movements of organs of articulation;
- anatomical peculiarities in construction of the articulatory apparatus influence the formation of the correct pronunciation, imbalance of the oral and nasal cavities affect the melodic components of speech;
- thyroid dysfunction affects the timbre and pitch of the voice. [3, p.72]

Modern approaches in the formation of speech of children with Down syndrome are based on the peculiarities of their psychomotor profile, that suggests to consider the strengths and weaknesses of their development.

Strengths of this category of children can be a positive factor in the formation of social skills and speech. Such a strong points of the development can include:

- high simulation capabilities that allow inherit for adult some speech and non-speech signals;
- visual perception and visual memory, which make the basis for the usage of visual clues;
- high sensitivity to tactile-motor stimulation, which make the basis for the formation of general and fine motor skills;
- interest in the interaction with the adults.

Here are some possible options for the implementation of individualized teaching of children with this genetic pathology in a secondary school. So individualization in pedagogical literature reflects different situations in the learning process:

1. The student is given special attention - he gets individualized task chosen for him. As a result, a pupil at a particular time is disconnected from the overall work of the class (student activity is individualized against the overall work of the class).

Everyone in the class perform tasks of different levels and one individual student works on the task of the level at which no one else in the class works - such a task is called individualized, but, in fact, it is differentiated (reflects multilevel training). [6, p.64]

During studying forms of educational activity of younger pupils, we came to the conclusion that all forms can be divided into two groups: collective and individual. Because of it, we select several types of form of work: individual, individual-group, individual-frontal, collective-group, collectively-front. Individual form - is an independent work of the student with individualized task; individual-group - is an independent work of the student with differentiated tasks within the class; individual-front

– student's work with overall tasks for the entire class; collective-group - students work together on overall and differentiated tasks within the group; collective-front – students' teamwork entire class on overall tasks.

The analysis of approaches to individualization and differentiation in a class allowed to identify the following key elements of organization in individualized and differentiated work:

1. Types of tasks according to the degree of individualization (based on the differences and similarities of students in class):

- the common task – the total for the entire class, based on a similar peculiarities, which have all the students;
- differentiated – the total for the students of one homogeneous group and different from tasks of other homogroup, orientated on typological features of students;
- individualized – individual task for an individual student, that is chosen according to his individuality.

2. The main forms of work organization:

- front - involves simultaneous execution of all students (of a whole class or a single group) of the same task under the guidance of a teacher;
- group - a group of students do a task, it is characterized by cooperation of students within a group; this task can be both total and differentiated for all students from class; the task, that is done by particular student within the group, can be both total and differentiated for students of his group;
- individual - student do the task by himself without cooperation with other children, while he can use direct or indirect help of a teacher (help from other students is also possible); a task that student do by himself can be for whole class, differentiated and individualized. [2, p.24]

3. Focus of teacher's work on students:

- on the whole class;
- on the homogeneous groups (homogroups) - typological groups which are underlined in the classroom according to certain criteria; each homogroup is relatively homogeneous (has students of the same level);
- on the heterogeneous groups (heterogroups) - groups of students purposefully formed from different homogroups; each of the heterogroup is heterogeneous (we do not considered here heterogroups, which are formed outside accounting students'

peculiarities that is not a manifestation of individualization and differentiation in teaching process);

- on the individual students.

4. Cooperation while doing the tasks:

- teacher with class;
- between teacher and individual students;
- between teacher and a group of students;
- between individual students;
- between groups of students.

Analysis of scientists' researches and practitioners identify the following necessary to organize explicit individualization and differentiation of training into a class conditions:

Knowledge of students' peculiarities in a class (differences and similarities).

Analysis of a teaching material.

Setting goals of individualized and differentiated work and its results for each student.

Presence of a system of differentiated (individualized) tasks.

Presence of a system on differentiated (individualized) tasks, combined with the overall work of a class. [4]

There are two main stages of organization of work within the class in individual and differentiated forms: 1) a preparatory stage; 2) a stage of implementation of individualization and differentiation within the class. During the first stage a teacher diagnoses class in order to determine the levels of children's readiness to learn, diagnoses teaching material to anticipate the difficulties which can have a place in children with such levels of readiness when study it. On this basis there is a differentiation of class according to the typological peculiarities into groups and according to specific features - on the individual students. For homogroups and individual students of a class teacher provides the system of specific tasks, which should ultimately lead to the understanding of material by each student. According to peculiarities of children, educational material, tasks that students should to do, teacher previously considers and make a system for optimal work on the current lesson or in the lessons' system for each student. This system of work may include any form of work (frontal, group, individual) and their combinations which are suitable at this stage of studying. [7, p.65]

On the second stage the direct implementation of ideas has a place - organization of individualized and differentiated studying work in a class. During it each student performs tasks corresponding to his abilities,

he is involved in collective and individual forms of work. As a result, the individual development of each student and mastering of studying material should be at a satisfactory or a higher level. [4, p.58]

Analysis of different approaches to the organization of individualized and differentiated studying in the class showed that there is not a common terminology that allows to build a theoretical system of work within a class with individualized and differentiated teaching. There are differences in key concepts of individualization and differentiation and in the understanding of the forms of organization of teaching in destination of individualized and differentiated tasks.

Developing correction-developmental methods of education of children with Down syndrome we should take to account some peculiarities of their development. For example, the basis of their correctional teaching can consist of:

1. the organization of the conditions for the formation of children's communication skills with others, support for non-verbal means of communication;
2. the organization of proper nutrition as an effective way to stimulate the organs of articulation.
3. the formation of children's social skills and interaction with adults at home and during the game;
4. the formation of children's abilities to understand the speech of others;
5. Additional methods of speech's stimulation (facial and organs of articulation massage, exercises for the development of fine motor skills, the development of speech breathing);
6. particularities of attention, perception, memory and thinking of children with Down syndrome dictate the need to ensure their educational process with a large number of visual aids.

Studies and observations of the development of children with Down syndrome indicate the need for long-term rehabilitative lessons to build communication skills and speech development that requires a careful approach to the selection of preschool and then the school educational institution, taking into account the individual peculiarities of each child with this genetic disorders. [3, p.115]

Studying of features of the development of problem of individualization and differentiation in primary education, we obtained the following conclusions:

1. Conceptual background of the development of frameworks problem requirements: mandatory accounting individually-typological features of

pupils; development of special abilities and talents; participation of each student in the classwork; developing training; comprehensive development and maximize the impact of education of each student; understanding of a common educational material. New theoretical level of development of the problem was caused by the development of theory and method to optimize the learning process, the emergence of pedagogy of cooperation, activated and technological approaches to learning, conception of student-centered education.

2. The main directions of development issues in the theory and practice of teaching younger schoolchildren were: individualization and differentiation according to learning content, level and profile individualization and differentiation (according to the differences caused by the content of education and to the presence of differences in the capabilities and needs of its assimilation in children); as well as the creation of a system of individualized and differentiated forms and means of education, both at the micro-, meso- and macro- levels (according to the nature of teaching, learning; to the rate of progress in studying; to interests/special abilities). The development of the problem within the class was conducted in three main areas: accounting differences of students in training, learning and educational interests. [6]

3. On the base of the analysis of scientists' approaches (H. Kobernik, Y. Malevany, Z. Onyshkiv, V. Rymarenko, A. Savchenko, O. Yaroshenko etc.), we have identified and summarized the achievements in the theory and practice of elementary education in the organization of individualization and differentiation within a class: methods of individualization and differentiation of tasks (for all the class, for a group and individual) for the individual work of students; individualized and differentiated variants of group work; ways of organizing of learning in heterogeneous classes are possible (as the "primary" and "secondary" differentiation); peculiarities of teaching practices in the form of the characteristics of the implementation of individualized and differentiated education (both "closed" or "open" for students; "absolute" or "limited" according to the coverage of students by differentiated approach); various forms of cooperation in carrying out educational tasks and organization of academic work on educational tasks (general, individualized, differentiated) in terms of "manifest" and "latent" individualization of education; basic elements and conditions of "manifest" individualization of learning, stages of . [4, p.34]

In the results of research the main trends of development of the problem of individualization in correctional pedagogy are identified:

Active learning and the implementation of foreign and native experience

of education, the search for new content, forms and methods of training, a comprehensive studying of the individual peculiarities of primary school children;

- the development of forms of external and within a class individualization and differentiation of primary education in three main directions, taking into account the nature of teaching and learning of younger students, a rate of advancement of children in studying, their interests and special abilities;
- the dominant development of the forms within a class individualization and differentiation of primary education in a class-lesson system: techniques of individual and differentiated approach to students at different stages of the lesson; methods of individualization and differentiation of homework and learning activities during the lesson; ways of organizing of self study in schools and day-care groups, circles groups' work;
- purposeful development and implementation in practice of the initial studying of forms of external individualization and differentiation of learning: opening of schools and classes alignment; creating classes with accelerated training, specialized schools and classes with in-depth studying of certain disciplines, specialized groups and classes in schools with day-care groups, electives;
- approval of the directions in the development of the problem of individualization and differentiation of learning process, focused on differences in the content of education, differences in the peculiarities and needs of younger students: level and profile individualization and differentiation of training; individualization and differentiation in the content of studying. [2, p.67]

The analysis does not cover all aspects of this multifaceted problems. The prospect of its further research consist of the detailed studying and analysis of best practices of individualization and differentiation of teaching of primary school children with Down syndrome in Ukraine, influence of the foreign psycho-pedagogical concepts on the development of ideas based on individual-typological peculiarities of students with psychomotor features of development in native theory and practice of correctional education.

Transliteration of references:

1. Bruni M. Formirovanie navykov melkoy motoriki u detey s sindromom Dauna /M. Bruni // Per. s angl. A.Kurt. – M.:Svyaz-Print, 2005, - 212s. (language Russian)
2. Volodko V.M. Individualizatsiya i diferentsiatsiya navchannya / V.M. Volodko //

- Problemi suchasnoyi pedagogichnoyi osvity: Zb. statey. – Ch.1. – K., 2000.– 136 s. (language Ukrainian)
3. Kataeva A.A., Strebleva E.A. Doshkolnaya oligofrenopedagogika. / A.A. Kataeva, E.A. Strebleva // - M.: Prosveschenie, 1988. 264s.(language Russian)
 4. Kobernik G.I. Individualizatsiya i diferentsiatsiya navchannya v pochatkovih klasah: teoriya ta metodyka. / G.I. Kobernik // Monografiya. – K.: Nauk. svIt, 2002. – 231 s.(language Russian)
 5. Lauteslager P. Dvigatelnoe razvitiye detey rannego vozrasta s sindromom Dauna. Problemy i resheniya. / P. Lauteslager // Per. s angl. O.N. Ertanovoy. – M., «Monolit», 2003, 346s.(language Russian)
 6. Furman A.V. Psihodiagnostika intelektu v sistemi diferentsiatsiyi navchannya. / A.V. Furman // Kniga dlya vchitelya. – K.: OsvIta, 1993. – 224 s.(language Ukrainian)
 7. Shamova T.I. Individualnyi i differentsirovannyi podhod v obuchenii / T.I. Shamova // Aktivizatsiya obucheniya shkolnikov. – M.: Pedagogika, 1991. 213s. (language Russian)

The Author

Andrey Savytsky –
*Associate professor of Department speech therapy o
f Correctional Pedagogy and Psychology Institute
of the National Pedagogical University named
M. Dragomanov, Kyiv, Ukraine
e-mail: savva2008@ukr.net*

Abstracts

АНДРІЙ САВИЦЬКИЙ. До проблеми індивідуалізації навчання дітей з синдромом Дауна. У статті на основі аналізу наукових праць вітчизняних та зарубіжних дослідників розглядається проблема організації індивідуалізованого навчання дітей з синдромом Дауна; аналізуються дані щодо психофізичного профілю дитини з даною генетичною патологією, здійснюється дослідження анатомічних та біологічних складових розвитку психічних процесів дітей з синдромом Дауна; виявляються особливості в переважній обробці зорово-просторової інформації та відповідних можливостей експресивного мовлення; робиться психофізичне обґрунтування застосування індивідуалізованого навчання в процесі розвитку дітей з синдромом Дауна; виявляються фізіологічні основи розвитку психіки цих дітей та вивчаються слабкі і сильні сторони навчальної діяльності дітей з даною генетичною патологією. У статті висвітлюються концепції індивідуалізованого навчання дітей з синдромом Дауна в умовах інклюзивної освіти. Детально розглядається

психомоторний розвиток дітей з даною генетичною патологією і пов'язані з ним основи здобуття освіти в молодшій школі. Здійснено аналіз сучасної спеціальної літератури щодо особливостей застосування форм і методів індивідуалізації в процесі розвитку дітей з синдромом Дауна в освітніх закладах. Визначено основні методологічні положення навчання цих дітей в умовах інтеграції до загальноосвітніх навчальних закладів. У статті обґрунтована необхідність розробки індивідуалізованої системи навчання дітей з синдромом Дауна. Визначено основні напрямки організації спеціального навчання дітей з даною генетичною патологією в умовах загальноосвітніх навчальних закладів.

Ключові слова: діти з синдромом Дауна, індивідуалізація, індивідуалізоване навчання, інклюзивна освіта, психомоторний профіль.

ANDREJ SAWICKI. Problem indywidualizacji nauczania dzieci z zespołem Downa. W niniejszym artykule na podstawie analizy prac naukowych badaczy ojczystych i zagranicznych rozpatrzono problem indywidualizacji nauczania dzieci z zespołem Downa; przeanalizowano również dane dotyczące profilu psychofizycznego profilu z patologią genetyczną; zbadano cechy charakterystyczne anatomicznych i biologicznych komponentów rozwoju psychicznego dzieci z zespołem Downa; określono właściwości dominującego wzrokowo-przestrzennego opracowania informacji; przedstawiono psychofizyczne uzasadnienie zastosowania zindywidualizowanego nauczania w procesie rozwoju dzieci z zespołem Downa; ukazano fizjologiczne podstawy rozwoju psychicznego takich dzieci oraz przeanalizowano badają mocne i słabe strony działalności edukacyjnej dzieci z tą patologią genetyczną. W artykule zaprezentowano koncepcje zindywidualizowanego nauczania dzieci z zespołem Downa w edukacji inkluzyjnej. Szczególną uwagę poświęcono psychomotorycznemu rozwojowi dzieci z tą patologią genetyczną i związanym z nim podstawom nauczania w nauczaniu początkowym. Określono główne zasady metodologiczne nauczania tych dzieci w warunkach ich integracji w zwykłych szkołach ogólnokształcących. W artykule przytoczono również teoretyczne i praktyczne zasady specjalnego nauczania dzieci z zespołem Downa w młodszym wieku szkolnym wieku na podstawie zastosowania specjalnych metod edukacyjnych. **Słowa kluczowe:** dzieci z zespołem Downa, indywidualizacja, indywidualizacja nauczania, profil psychomotoryczny.

АНДРЕЙ САВИЦКИЙ. К проблеме индивидуализации обучения детей с синдромом Дауна. В статье на основе анализа научных работ отечественных и зарубежных исследователей рассматривается проблема индивидуализации обучения детей с синдромом Дауна; также анализируются данные относительно психофизического профиля детей с генетической патологией; исследуются особенности анатомических и биологических составляющих психического развития де-

тей с синдромом Дауна; определяются особенности преимущественной зрительно-пространственной обработки информации; делается психофизическое обоснование использования индивидуализированного обучения в процессе развития детей с синдромом Дауна; выявляются физиологические основы психического развития таких детей и изучаются сильные и слабые стороны учебной деятельности детей с данной генетической патологией. В статье освещаются концепции индивидуализированного обучения детей с синдромом Дауна при инклюзивном образовании. Детально рассматривается психомоторное развитие детей с данной генетической патологией и связанные с ним основы образования в младшей школе. Определены основные методологические положения обучения этих детей в условиях интеграции в общеобразовательные учебные заведения. В статье приводятся теоретические и практические основы специального обучения детей младшего школьного возраста с синдромом Дауна на основе применения специальных образовательных методик.

Ключевые слова: дети с синдромом Дауна, индивидуализация, индивидуализация обучения, психомоторный профиль.

ANDREY SAVYTSKY. To the problem of individualization in education of children with Down syndrome. In the article on the basis of an analysis of the scientific works of domestic and foreign researchers addressed the problem of the individualization of the education of children with Down syndrome; also analyzed the data on the psychophysical profile of children with genetic pathology; investigated anatomical and biological components of mental development of children with Down syndrome; are determined by the particular precedence visually-spatial information processing; done strategy and methods of combating justification for the use of customized training in the process of development of children with Down syndrome; identifies the physiological basis of mental development of such children and examines the strengths and weaknesses of the training activities of the children with this genetic pathology. The article highlights the concept of customized training for children with Down syndrome in the inclusive education. Detail is considered the psychomotoric development of children with this genetic pathology and related basic education in a minor school. Identified the main methodological provisions of the education of the children in the context of the integration of the educational institutions. In the article are the theoretical and practical basis for the special education of children in primary school age children with Down syndrome on the basis of the application of the special educational methodologies.

Key words: children with Down syndrome, the individualization and individualization of learning, psychomotor profile.