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Therapeutic education of children with learning difficulties in early-school education

Abstract: This article contains an overview of forms of psychological and pedagogical assistance provided to primary school pupils in years I - III in the period from the 1970s until today. It explains terminology associated with these issues and changes in the understanding of these concepts, as well as describes the legal grounds on which such assistance is based, basic methods used in corrective/compensatory procedures and practical steps and rules for the organisation of such activities. Directions of changes contemporarily occurring in the implementation of such classes at school have also been indicated.

Key words: learning disabilities, psycho-pedagogical assistance, corrective/ compensatory work, pupils with learning difficulties.

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Terapia pedagogiczna dzieci z trudnościami w uczeniu się we wczesnej edukacji

Abstrakt: Artykuł zawiera przegląd form pomocy psychologiczno–pedagogicznej udzielanej uczniom w klasach I-III w okresie od lat 70-tych do dzisiaj. Wyjaśniono terminologię związaną z tymi zagadnieniami, zmiany jakie dokonywały się w rozumieniu tych pojęć. Opisano podstawy prawne, na których została oparta ta pomoc w szkole, podstawowe metody wykorzystywane w pracy korekcyjno–kompensacyjnej oraz etapy pracy i zasady organizowania takich zajęć. Wskazano kierunki zmian, jakie obecnie nastąpiły w realizacji takich zajęć w szkole.

Słowa kluczowe: trudności w uczeniu się, pomoc psychologiczno–pedagogiczna, praca korekcyjno–kompensacyjna, uczniowie z trudnościami w uczeniu się.

Failure in learning the content provided on a certain level of education has existed since schooling became obligatory. In Poland, this problem was widely publicised in the aftermath of in-depth studies on the phenomenon of psychological and pedagogical school failure conducted in the 1960s, which revealed a number of determinants affecting learning difficulties (Spionek, 1970; Wasyluk-Kuś, 1971; Spionek, 1973; Nartowska, 1980).

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Developmental delays and inconsistencies found amongst pupils with complex school failure required specialist intervention, calling for the arrangement of various forms of assistance. It was the first time when a legal basis to allow for specialised equalisation of developmental delay had been created and forms of relevant assistance had been standardised (*Wytyczne Ministerstwa Oświaty...*). School as an institution was then forced to create extra-curricular activities for pupils with diagnosed speech disorders or developmental disorders and problems caused by deficiencies in visual, auditory and kinaesthetic/motor analysers, resulting in reading and writing difficulties. The regulations were meant to facilitate the creation of corrective/compensating training groups at preschools and lower secondary schools. There appeared regulations pertaining to the diagnosis and treatment of pupils with developmental disorders with appropriate corrective/compensation forms of assistance. Accordingly, ranges of teachers' and school psychologists' duties were determined (*Zarządzenie Ministra Oświaty i Wychowania z 30 maja...; Zarządzenie Ministra Oświaty i Wychowania z dnia 7 listopada...*).

Shortly after, a selection of methodological elaborations describing methods of implementation of corrective/compensatory classes for years 1–3 of primary school was published (Zakrzewska, 1976; Wasyluk-Kuś, 1978; Sawa, 1980). At the same time, the need for individualised methods of checking the levels of such pupils' classroom abilities was emphasised, as well as changes in evaluation criteria for equalising pupils' deficiencies were developed, so as not to discourage them from learning (Czajkowska, Herda, 1989). Also, phenomena of specific learning difficulties, such as developmental dyslexia, dysgraphia, and later dyscalculia were addressed (Bogdanowicz, 1991).

In the 1980s, corrective/compensatory teams reached the climax of their activity. Later, their reach was curtailed, sometimes due to problems with the employment of specialists as well as with financial restrictions. Currently, specialist assistance to children with learning difficulties constitutes an integral part of educational activities at schools and is administered by professionals working with teachers and psycho-pedagogical clinics (*Rozporządzenie Ministra Edukacji Narodowej z dnia 17 listopada 2010 r. w sprawie zasad...*).

The main objective of teachers working with the youngest pupils is to organise the learning process in such a way which would allow all pupils to participate regardless of their developmental level at a given moment. Class groups are varied, so it is difficult to conduct educational activities with respect to the needs of each and every pupil. With regard to those pupils with persistent learning difficulties, there may be a need to supplement the core educational activities with corrective/compensating and stimulat-

ing extracurricular classes, additionally exerting impact on pupils' motivation to learn. The whole of these interactions may be labelled as *therapeutic education* of children with learning difficulties.

Therapeutic education should not be of ad hoc and one-off character, thus, detailed knowledge about a given pupil, as well as awareness of risks associated with the interaction between the limits of his or her development and the requirements posed at school, constitute its major determinants. Effective implementation of pre-established objectives requires long-term, consistent procedures that are constantly monitored and modified as necessary.

In this understanding, such education is a sequence of purposeful, planned educational activities implemented systematically by the teacher and a group of assisting professionals. The basis for the creation of a programme of such interactions is provided by a diagnosis of various areas of a pupil's development. It demarcates a pupil-tailored, detailed work schedule, allowing for systematic complementation of developmental shortcomings as well as for personality enrichment. However, the work must proceed in such a way that it does not exceedingly burden the pupil. Also, it must be incorporated into regular classes and extracurricular activities must not be overly complex.

The objectives and tasks of this type of education can be identified in three procedural areas:

- 1) supporting children in their mental difficulties, i.e. influence that is meant to enhance resistance to hurdles and obstacles, and thus to motivate to school work;
- 2) planned and systematic support for the development of various functions involved in learning, i.e. removal of disorders or their effects, additional risk prevention, promotion of *strong* developmental aspects;
- 3) improvement of school functioning, i.e. help in the reduction of gaps in school material, making use of interests and maintaining appropriate contact with peers.

Implementation of these objectives requires ongoing monitoring of the undertaken therapeutic initiatives, and their flexible adaptation to the changing school-life conditions. The regulations issued by the Polish Minister of Education describe in detail the pupils who are covered by this assistance, as well as forms of work through which this assistance is granted and how to implement it in school practice, together with the course of diagnosis and the procedures for the team of head teacher's advisors within the scope of forms and methods of implementation of this assistance (Rozporządzenie Ministra Edukacji Narodowej z dnia 17 listopada 2010 r. w sprawie zasad...). In these regulations, among the 12

groups of children covered by psycho-pedagogical assistance, pupils with disabilities, with specific learning difficulties, with impaired verbal communication and with educational failure were listed (see par. 2.1). It is expected that psycho-pedagogical assistance in the form of “therapeutic classes”, “educational-compensatory activities”, “specialist classes: corrective-compensatory, speech therapy, social therapy and others of therapeutic character” will be provided (see: par. 6.1, items 1, 3 and 4).

Educational-compensatory classes are intended for pupils with learning difficulties, particularly in complying with the educational requirements arising from the curriculum, corrective-compensatory classes are organised for pupils with developmental disorders and dysfunctions or with specific learning difficulties, while classes of speech therapy are organised for pupils with those speech disorders which cause impaired verbal communication and hinder learning (see: par. 8, items 9, 10, 11). These forms of assistance have not been included within the mainstream curricular framework for years 1 to 3 of primary school, but may be implemented as extra hours at the disposal of the head teacher, who, on the basis of recommendations of his or her team, determines “the form, the methods and the duration of the assistance” (par. 21, item 1).

Children with a decision about the need for special education at the primary level are subject to slightly different regulations, which provide them with the opportunity to benefit from special programmes and activities run by a special education pedagogue (Rozporządzenie Ministra Edukacji Narodowej z dnia 17 listopada 2010 r. w sprawie warunków...).

Supporting children’s development is meant to limit school difficulties. The term *development support* is understood as a professional and specialised initiative. It complements the overall educational influence on pupils and aims to strengthen and stimulate the specific functions of their mental and social development (Obuchowska, 2003) and as such, it is related to stimulating cognitive, emotional and social skills. During such influence, one should always take into account the child’s maturity level and the conditions attached to its development. In the case of a disabled child, also developmental shortcomings and limitations, the reaction of its immediate environment and the accompanying threats to further development due to the disability should be considered.

However, expecting that a variety of extracurricular activities will completely remove such difficulties is not realistic. Even with very strong involvement of both the teacher and the child, the child it is not capable of following the programme set for the whole class and of catching up with other pupils. Such measures usually improve the functioning of the child and his or her ability to overcome his or her current difficulties. Lack of such assistance greatly aggravates the pupil's situation (Kowaluk, 2009).

However, such treatment must be usually continued for a long time. It must be assumed that such classes will introduce the child to learn at the right level, and the development will proceed at a faster pace than before. However, long-term character of this process must be taken into account as well as this that the pupil will encounter difficulties within new areas at later educational stages. Thus, early anticipation of risks and facilitated crossing of thresholds to further educational levels constitute an important component of these activities.

Thus, we look at these initiatives as parallel to regular school learning, as systematic and as planned for a long time. It is meant to meet the child's current needs and prepares him or her to the circumstances at school in which he or she functions, although in comparison to other participants in education, he or she will continue to fall behind. Such child's learning progresses in a characteristic way and requires an understanding of the specific situation on the part of teachers and parents. Such pupils must learn to look positively at the results of their work, understand their progress, constantly work on mastering different skills and not alienate the faced obstacles and be able to ask for help when necessary.

The therapeutic nature of this influence is reflected in methods applied to educating such pupils, which are supposed to be of a playful nature and to contain a number of relaxing and psychotherapeutic measures.

When working with children with learning difficulties, we may distinguish four essential components:

- 1) firstly, multi-directional diagnosis of the child's development, description of developmental problems, delays and strengths must be instituted;
- 2) on this basis, an individual programme is elaborated, which includes the necessary corrective initiatives, as well as support measures for such developmental ranges which may provide foundation for the introduction of compensating measures and the reinforcement of the motivation to learn;
- 3) implementation of the preset goals is conducted by means of selected methods, under certain conditions and within a pre-established certain time sequence;
- 4) in the course of these activities, their current and periodic evaluation is performed, both in relation to the acquisition of specific skills and with reference to the effectiveness of the selected methods and of the process as a whole.

All the above-mentioned steps are interlinked. The initial diagnosis constitutes a foundation for the creation of the programme, which none-

theless must be flexible and may undergo changes during its implementation as confronted by current observations or subsidiary diagnoses.

In the beginning, the selected methods may prove ineffective, so it is necessary to have parallel methods of implementation of the selected targets at hand. Sometimes, it becomes necessary to incorporate other elements into the therapy, such as expanding psychotherapeutic interactions or introducing specific skills training. Thus, such procedures are of dynamic character and must be adapted to the current needs and conditions, and additionally, they require consistency and regularity.

This poses high requirements on the person carrying out these activities, who must be well informed in developmental issues, in particular in the subject of infantile disorders. A specialist, familiar with these patterns, who is also equipped with a wide range of methods that can be used in a particular situation, is a necessity in order to adequately implement these methods (Spionek, 1970; Zakrzewska, 1996; Gruszczyk, Kołodziej, 1980). Psychotherapeutic measures accompanying corrective and compensatory work, which are also motivational and relaxing, require extensive expertise in this respect, conscious shaping of communication skills and seeking and expanding the therapist's knowledge of various developmental hazards. If a child attends several activities run by different specialists, the latter should create a team that carries out the program in a coordinated manner. Speech therapy exercises, corrective gymnastics, psychotherapy, relaxation, etc., incorporated within the programme, require constant cooperation, and frequently specific instructions for those who work with the child (teachers, tutors, parents).

Currently, initial assessment is made at school premises, where the head teacher decides about the form and extent of assistance for a particular pupil on the basis of indications from his or her team (Rozporządzenie Ministra Edukacji Narodowej z dnia 17 listopada 2010 r. w sprawie zasad..., par. 19, 20, 21, 23, 27). Such solutions will create conditions for a group of experts to co-operate within school premises in order to develop coordinated assistance programmes for specific pupils, and to control their implementation and effectiveness. Joint analysis of each pupil's situation makes it possible to improve the therapeutic effectiveness of the school.

Pedagogical and psychological diagnoses include various ranges of research samples and in the past they underwent changes under the influence of different views on the determinants of school difficulties. They define the level of intelligence and the development of perceptual, i.e. motor, visual, auditory functions, of lateralisation, spatial orientation, manual motor skills. Previously, their focus rested on the identification and interpretation of reading and writing errors or improving reading and com-

prehension speed within the class attended by a given pupil (Górniewicz, 2000). Also, description of the level perceptual-motor integration was suggested (Bogdanowicz, et al., 2000).

In the recent years, the methods of diagnosis have been profoundly modified, when the role of conscious actions on words and texts, of understanding the context of linguistic communication, and of understanding the importance of different texts and topics in them, was recognised (Krasowicz-Kupis, 1999; Krasowicz-Kupis, 2003; Maurer, 2003). The diagnosis and therapy, and in particular, the specific difficulties in reading and writing started featuring other ranges of diagnostic tests than before (*Diagnoza...*, 2009, see also: Bogdanowicz, et al., 2010). Also, foundations of neuropsychological disorders hindering arithmetic calculations, i.e. developmental dyscalculia, were attempted (Oszwa, 2008). Sometimes, application of psychophysical and psycho-physiological tests to diagnose dyslexia is suggested (Jaśkowski, Rusiak, 2003) and research and development of readiness to operate on numbers is recommended (*Wspomaganie...*, 2009). When formulating an opinion about a pupil, it is important to shift attention from the description of the disorder onto perception of his or her developmental strengths, on which to base the planned treatment. Further assessment of the development tends to be instituted by observation accompanying the therapy, occasionally with the requirement of further in-depth diagnoses. Yet, there are still deficiencies in diagnoses of individual methods of learning about the environment (Suświłło, 2005) and of children's responses to difficult situations.

Programming the therapeutic work denotes setting objectives and tasks and anticipating their implementation. Most authors describe several stages of corrective-compensatory work. Each of these stages includes the formulation of specific objectives, so to achieve them, specific methods are selected. The intensity of different activities at different stages varies. Initially, psychotherapeutic influence is particularly emphasised, which later accompanies the remaining procedures. Correction and compensation of the disrupted functions usually precedes compensation of deficiencies in knowledge, thus, the following sequence is of utmost importance: execution of activities focused on various functions and their cooperation, and then treatment of school tasks that as based on them (Gruszczyk, Kołodziej, 1980). These three orientations are represented in different configurations, both in the planning of the course of work and in the scenarios of specific activities, although some theorists and practitioners of therapeutic education rather emphasise the corrective-compensatory component and the special methods of teaching reading

and writing or the therapeutic-relaxation and correction-compensatory components.

The work begins with the initial period. Its aim is to create appropriate conditions for cooperation and familiarisation with the character of the classes. Preparation to work may assume many forms: establishing good contact with the child, but it might also be acting out the accumulated tensions (relaxation) or recuperation of self-confidence (Zakrzewska, 1996). Sometimes it is understood as mastering specific skills, such as audio analysis of speech and exercising the performance of different functions (Grabalowska, et al., 1996). Playful forms of classes, with no elements directly related to school learning, dominate in it. It is especially important to thoroughly develop an atmosphere of understanding and mental comfort, as well as mutual trust between the therapist and the pupil. During the initial stage, we accept all the proposed exercises, because the goal at this stage is to include the child into cooperation. Thus, we reward his or her efforts, but we mainly suggest such tasks that the child is on the one hand, capable of performing and on the other hand, is interested in.

The next period, the actual corrective-compensatory work, is meant to remove the obstacles in taking advantage of the normal course of school education through equalisation or reduction of the deficits which interfere with learning and development. This goal is usually spread over several specific objectives, because the difficulties usually stem from multiple sources. During the planning of this period, we rely on a detailed diagnosis of the development of different functions. However, we may point out here some common solutions for the undertaken initiatives. The idea of E. Gruszczyk and D. Kolodziej (1980) constitutes such an attempt at organisation, which distinguishes four stages within this time: simple tasks, ordered and structured tasks, multisensory experiences and tasks, and social reinforcements. They are isolated according to the method of performing tasks and ways of providing gratification. During the stage of simple tasks, their form must allow for obtaining clear results, and after obtaining a positive result, the child may immediately be rewarded, either by showing joy or by a reward of material nature. The stage of ordered and structured tasks requires a slightly different approach to work, as in it, tasks consists of components that gradually lead to solutions. We follow the child's performance, accepting the child's engagement, but we give an explicit reward after finishing the entire operation. In this way, we gradually let the child work longer. In the next stage, the formula undergoes yet another change from single focus tasks to tasks requiring multisensory alternation of actions within different functions, which is a coordinated operation requiring more attention, especially when moving from one level of sensory modality to another. Such actions are also activities related to

reading and writing, so at this stage it pays off to already introduce some elements of school programme, but they should not dominate the therapeutic procedures. Only during the fourth stage, when we introduce a specialised intensive training involving activities preparing children for schoolwork methods, can we expect that the child gradually begins to feel the same satisfaction from successfully completed tasks. The aim therefore is not only the task itself, but the ability to independently assess the effect of work. The pupil tries to get approval for his or her performance and its outcome, expecting praise and appropriate assessment, which may be defined as social reinforcement.

After the improvement of basic shortcomings in the functioning of the pupil's school life, the next aim is to fill the gaps in academic skills or make them smaller in relation to peers. Some authors regard it only as a period of compensatory measures, but the majority points out that too rapid transition onto school-like material may cause emotional stress in the child and withdrawal of some of the already acquired skills. Therefore, it is worth identifying two additional stages of this period, i.e.: the stage of filling and levelling shortages, and the stage during which the proper process of integration into school work begins. The aim of the former is to bring together the content of school curricula and its individual elaboration with the child, which will allow for rapid removal of gaps in the core material. The pupil must be able to consciously evaluate his or her own work in relation to the requirements and learn how to choose specific ways of correction. During the final stage, we enable the comparison of various pupils' work, choosing the best, determining correct implementation of elements and rejecting incorrect solutions. A pupil becomes acquainted with the competitive situation, which requires acceptance of failures and introduces the element of self-evaluation.

This suggestion does not designate a specific duration of each stage, but in a sufficiently general way defines the objectives of each stage in the three directional impact. Thus it seems useful in planning activities for children with difficulties at school, although in practice the situation is usually more complex and the objectives of each of these stages overlap, some activities may be more complex, and other overly simplified.

These three lines of action (impact on the emotional sphere, correction and compensation of developmental defects and removal of gaps) are also reflected in scenarios for individual extracurricular corrective/compensatory units. A detailed course procedures is associated with a particular stage of work. Thus, during the initial stage, they will be more of a directed play, whereas during the final stages, they will assume the form of a relaxed lesson. It also depends on the adopted method of therapy,

which typically features alternating psychotherapy and training activities (Czajkowska, Herda, 1989; Zakrzewska, 1996). With a greater focus on psychotherapy and relaxation, the therapy has a permanent place during the initial and final sequences of the classes (Loebl W., 1986; Kaja B., 2001). Such a simplified diagram of activity scenarios is acceptable provided that there is change in the ratio of each range of activities over the lifetime of the therapy, and the whole course is conducted in the conditions of mental hygiene.

When discussing the implementation of corrective-compensatory activities, it is worth looking into the cited by various authors sets of rules of therapeutic work, meant to increase the effectiveness of the activities. Almost every major elaboration will feature a list of rules and all stress the need for individualisation of classes, which is understood as adaptation of the programme and class content to a particular individual (Zakrzewska, 1976; Czajkowska, Herda, 1989; Gąsowska, Pietrzak-Stępkowska, 1994; Zakrzewska, 1996; Górniewicz, 2000), whose needs and identified problems determine the course of therapy. This rule follows from the very nature of these activities and lies at the root of their organisation. H. Spionek (1970, p. 184) explains its essence in detail:

[...] there is not and cannot be such a universal method that would be equally effective for all children exhibiting fragmentary developmental deficits. The universality of optimal methods of teaching must necessarily be limited to children with typical and harmonious development.

This principle, usually placed as an initial rule, is sometimes explained in more detail, where it indicates the need for appropriate work pace and accessibility of exercises (Danielewicz, et al., 1981). Sometimes, it is a whole set of guidelines meant to select and grade the exercises according to their level of difficulty, as well as to compile them so as not to discourage the child or not to overload his or her mental stamina.

In the course of implementation, appropriate arrangement of the timetable is of utmost importance, interleaving easier tasks with more challenging, where the hardest, especially those related to the primary disorder of a given child, should be applied in small doses, but regularly and at frequent intervals (Spionek, 1970). The rules which define the conditions for the process of customising the exercises, the time, the level of difficulty and alternation patterns, can be divided into the group of rules governing the correction and the practice on cognitive deficits within the observed developmental deficits (Gruszczyk, Kołodziej, 1980).

Apart from this group, also principles governing the system of interpersonal relationship between adults and children are mentioned (Zakrzewska, 1996; Górniewicz, 2000). These rules apply to the therapeutic dyad: teacher – pupil, which creates appropriate atmosphere during

classes. This group should include the frequently mentioned principles related to acceptance and affection towards the child, respect for its individuality within working procedures, the sense of freedom and trust, or care for positive strengthening, assurance of support from the teacher and maintaining the interest in the therapy. The child must feel recognised and understood, and only then will it actively participate in the therapy. To this group belong the rules regarding full custody of the child, the impact on its environment, cooperation of the therapist with the child's family and the teacher (Zakrzewska, 1996; Górniewicz, 2000).

The third group of rules are those that relate to reducing school knowledge and skills gaps. This group may contain systematic and planned removal of reading and writing difficulties (Gruszczyk, Kołodziej, 1980; Loeb, 1986). The element of planning and systematic compensatory work is worth emphasising, as in a situation of developmental disorder, a systematic and planned operational system of sequences constitutes a necessary condition for the attainment of a positive outcome. Also, early initiation of the therapy, immediately after finding deficiencies or risk, is emphasised, as any delay in commencing the treatment significantly exacerbates the child's school situation.

A key element in the effectiveness of therapeutic and corrective-compensatory initiatives is the therapist himself, his knowledge and personality, as it is him or her who decides about the organisation of the whole scheme. The manner in which he or she will establish contact with the pupil, whether he or she will consciously engage the child's family, or create the right conditions for effective integration into academic learning, and sees the lurking dangers and appropriately solves the forthcoming dilemmas, and whether the environment will activate enough support for his or her initiatives, is often decisive as far the fate of a particular child is concerned. The therapist must therefore take care of his or her development and expertise, as well as to develop his or her personality traits.

The teacher's field of expertise includes a set of methods used in pedagogical work. Certainly, there are no methods that may help every child, so teachers must constantly make choices based on diagnoses and ongoing surveillance. There are new publications, new practical tools and new studies confirming the effectiveness of this or another method. In scientific literature and bibliographic guides, multiple ideas can be found. Therefore, below only selected authors' methods with examples of their applications have been listed. Thus, when analysing the literature, some basic types of methods used in therapeutic work may be isolated:

- focus on the development of perceptual motor and cognitive functions,
- methods based on specific methods of learning academic skills, such as reading, writing or counting, which differ from universal school methods,
- psychotherapeutic and relaxation methods that have been adapted for children.

In the first group of methods aimed at training perceptive/motor functions, there are two types of corrective proceedings:

- therapies in which exercises concerning isolated perceptual-motor functions are proposed,
- therapies which prescribe exercises in sensory and motor integration or cooperation of various perceptual-motor functions.

Different work methods may be isolated within them. Functions practised in isolation can be implemented in developmental sequence or all at once. Collaboration between functions may be obtained by binding them together, or selecting one and building the rest upon it. In practice, the described exercises are not a straight implementation of a single standard procedure, but they combine the elements of both methodologies. Studies on working with children with reading and writing difficulties, including suggestions for exercises related to the development of perceptual-motor functions (visual, auditory, motor [fine and gross]), logopaedic exercises improving pronunciation and phonemic hearing were all elaborated in the 1970s and 1980s. Nowadays, this trend is also represented in the therapy, although becoming aware of the importance of these functions for school success resulted in the inclusion of many such exercises within the usual pre-school and early school educational activities, as a preventive element in preparation for learning.

Exercises grouped by function type, proposed by N.C. Kephart (1970), are included in the first part of the therapy by T. Gąsowska and Z. Pietrzak-Stępkowska (1994). Exercises of this type, during corrective-compensatory classes, precede or are executed in parallel with exercises making use of letters. *The development of visual perception – Designs & Images* (Frostig, Horne, 1989; Pietsch-Szurek, et al., 1992) may serve as an example of a therapy strictly aimed at the development of one function. Other examples may be: phonemic hearing exercises (Rocławski, 1986), grapho-motor exercises (Tymichová, 1997), or programme of phonological awareness development (*Dźwięki...*, 2006). They have sets of exercises in each of these ranges at different levels of difficulty, they describe in detail the exercised functions and the course of the accompanying exercises, they can be matched to the actual efficiency of the child (e.g., after initial testing). The speed of their implementation is delineated by ongoing observation of the child's progress.

Examples of the second type of therapy, aimed at the cooperation of senses and motor skills, are a method of sensory integration (Ayres, 1972; Grzybowska, 1999; Maas, 1998; Przyrowski, 2012), or a method of Good Start as a proposal for an integration of perceptual-motor function through special exercises (Bogdanowicz, 1985).

In the sensory integration method, we are dealing with a set of exercises in basic sensory systems, such as touch, proprioception and balance, all targeted by a diagnosis. Games do not teach children specific skills, but contain intense sensory stimulation, providing opportunities for experiencing spatial position and reach of their limbs. This facilitates appropriate motor response to stimuli, which contributes to overall improvement in the organisation of the entire activity performed by the child. On its basis, visual and auditory sensations are constructed. The equipment used for the exercises include swings, balance beams, skateboards, large heavy objects, balls, tunnels, inclined planes, tourniquets, surfaces of various textures and softness, objects giving off different sounds or making it possible to track the movement of each of the senses, all combining the different elements of integration.

The Good Start method, which involves drawing patterns and letters in the rhythm of songs, has several versions for children of all preschool ages. A complete methodology for its implementation has been described in several books (Bogdanowicz, 1985). After some adjustment, it is also useful in the treatment of children with learning disabilities and mental retardation (Kosmowska, 1999; Bogdanowicz, Szewczyk, 2007). It may be applied in its entirety as a series of exercises, or it may be complementary to teaching, both in individual and group therapy, and as such, it makes it possible to meet the need for movement and expression in children who are otherwise reluctant to learn.

Classes practicing various perceptual-motor functions should be understandable for children. There must not only be implemented in the form of sensory exercises, but must be given a concrete meaning and their everyday life use must be demonstrated, be it in the form of self-service application (Zaorska, 2001), or to make a useful object which may be given as a present or used to play with a playmate (Danielewicz, et al., 1981). It is good when the content of the classes can be unified by a common theme.

In order to overcome the barriers in learning, correction methods in teaching reading, writing and arithmetic are used. Although they are focused on mastering these skills, they typically use different methods than those applied to other pupils in the class, even though many of their elements now feature in the educational packets for years 1–3.

Syllabic methods have for many years been used for the treatment of reading and writing in Polish educational practice. At the first stage of learning to read, they familiarise pupils with the phenomenon of transformation of words and sentences by manipulating letters. Children with delays in the acquisition of these skills need such manipulation much more than their peers. The awareness of changes in the meanings of words when replacing one vowel, teaches careful and accurate reading skills. Various techniques involving play with written material, leading to the creation of words and sentences, do not cause fatigue in the use of text.

Within the methods improving reading techniques, usually also containing elements of writing, two lines of work may be isolated:

- from the synthesis of syllables to form words and texts (Gąsowska, Pietrzak-Stępkowska, 1994; Grabałowska, et al., 1996),
- by analysing words or groups of words and combining words of a specific structure and gradual transition to working on longer texts (Kujawa, Kurzyna, 1994; Zakrzewska, 1996).

The first group is dominated by auditory, visual and motor exercises, which are associated with the read and written text or are performed on this text, and the other involves manipulation on read and written words or on their particles, and auditory elements (visual, motor) are used as a complementary support. In both of these methods, the mastery of letters assumes a similar form to the previously conducted visual and auditory exercises, and they are only later followed by the creation of two-letter open syllables, out of which two or three-syllable words are formed. Subsequently, the structure of syllables complicates, as the child transforms them with the already known elements and synthesises words from open, two-letter and closed three-letter syllables. Gradually, syllables containing consonant clusters are synthesised and included into the repertoire of words to read. Reading sentences and longer texts follow the act of mastering reading and writing single words. The authors suggest various forms of playing with letters: tables, crossword puzzles, guesswork, lotteries, syllable/word games, riddles and short texts.

E. Kujawa and M. Kurzyna (1994) make use of the analytical technique in their method. In the first case, exercise is initiated by an analysis of words on the level of syllables and phonemes, which is then followed by manipulation on syllables and phonemes in similarly constructed words. Each part of their handbook is devoted to words of the same linguistic structure (18 isolated structures) (Kujawa, Kurzyna, 1994). In each scenario for a particular part, the authors typically place 11 different exercises. The child realises the construction of a word, i.e.: what are its components, notes that words may vary by just one sound or syllable, that syllables change, and that the same syllables may be used to create dif-

ferent words and sounds and that replacing syllables results in a change of meaning. A fixed arrangement of the scenario introduces order into the whole procedure.

In the second therapy, manipulation is initiated immediately on sets of syllables or words (a dozen at a time). Having read them (in a given time slot), pupils internalise the structure of these syllables (words) and perform a range of activities on them, which involve a variety of visual, auditory, spatial orientation, memory, imagination features, looking for words and syllables with certain common characteristics, such as the same consonant or converted consonant clusters, formed with the same ingredients, differing in length, etc. By means of these manipulations, they internalise the construction of words, including those with difficult spelling. The same exercises may be performed in different ways, with the focus on the use of auditory, visual and imagined/memorised elements. Recording the time of the initial reading and of the reading after text analysis, allows pupils to clearly notice the effectiveness of actions, as the latter is always faster and more accurate. This evokes a sense of achievement and encourages further training. The book also features a special observation scale to monitor the reading progress (Zakrzewska, 1996). The improved techniques for mastering reading encourage children to spend more time with the text and to use it for their own needs.

With regard to improving arithmetic skills, mainly functional methods are used, leading to operational reasoning at a particular level and to strengthening mental resilience in the face of difficult mathematical challenges, which is important in successful mastery of numbers. Mathematical therapy-like initiatives, according to E. Gruszczyk-Kolczyńska (1997), must have a character of directed playing, until children are ready to manipulate on numbers. Otherwise, all attempts at imposing foggy mathematical operations on children result in emotional problems and in the formation of a barrier. In a situation in which children work on mathematical material that is far below their mental potential, the emotional sphere becomes the focus of the therapy. Only after overcoming the barriers in this regard, may we expect rapid growth in skills, as long as we apply functional methods allowing children to discover the meaning of stability and reversibility of mathematical operations on their own and to have fun in enjoying their newly adopted skills.

Supporting classes are suited to the quality and quantity of school material, which is necessary to implement the curriculum. Sometimes, all it takes for children to effectively learn at their age and mental capacity level, is to breach the blocking barrier. In such circumstances, the specific offer prepared for children with difficulties in handling school material, may

not always be implemented in its full spectrum. We must observe the results and relate to the corresponding requirements of the school work.

Affecting the emotional sphere is another course of therapeutic procedures. Disorders within this realm, emotional instability with the accompanying hyperactivity or psychomotor inhibition, severely limit the effectiveness of any attempts at recovery. At the same time, signs of disturbance within this area may significantly exacerbate in the wake of perceived difficulties and school failure (Spionek, 1970). An important goal of the corresponding therapy is to try to achieve harmony in emotional development, to elicit self-confidence, to repair self-esteem and to recover positive attitude to school learning.

When working with children, various techniques of psychotherapeutic or relaxing character are used. These may be training sessions for children or exercises adapted to their level on the model of techniques used in adults. In the initial period, finger games to establish contact can be used (Sąsiadek, 2003; Sąsiadek, 2005), as well as drawing nursery rhymes or relaxing-therapeutic fairy tales (Szumanówna, 1991). Drawing, quasi-theatrical games (Małkiewicz, 2002) and elements of music therapy (Lewandowska, 1996) also constitute important techniques.

In many educational therapy textbooks, V. Sherborne's method of developing motion is mentioned and described (Bogdanowicz, et al., 1994; Sherborne, 1997), together with its application in working with children with learning difficulties. It had been developed for people with impaired development, including children with mental retardation. It is rooted in children's inherent need to experience close contact with an adult. Through movement, children learn their own bodies and shape their identities. They internalise the space around them and the opportunity to occupy it in order to act, to share it with other people and to establish close contact with them. Exercises can be used in the form presented by the author (exercise "with", "against", "together"). Also, detailed scenarios of different versions of these exercises have appeared (Bogdanowicz, Okrzesik, 2006). During practice, we observe the child, his or her relationship with the partner and we adapt the training to the emerging requirements. A special scale to diagnose children's and parents' the behaviour when carrying out these activities has been created (Bogdanowicz, 2004).

During therapeutic classes various relaxation techniques are used. For children, H. Wintrebert's relaxation, involving performing passive movements of the therapist on the patient lying on his or her back with legs outstretched and eyes closed has been elaborated (Kaja, 2001). B. Kaja suggests a modified version of the progressive relaxation training by E. Jacobson, which is adapted for children and consists in gradual

relaxation of muscles by applying tense and relaxing movements to them (Łobocki, 1990; Kaja, 2001).

A. Polender developed a modification of the autogenic training by J.H. Schultz, intended for children (Polender, 1988; Łobocki, 1990; Kaja, 2001). It consists in self-liberation of a relaxing reaction by means of special auto-suggestive formulas. Repeated several times (up to 6 times) statements like “the right hand is heavy”, or “...warm”, “I am breathing gently and calmly”, make it possible for a person lying in a darkened room to feel relaxed. An insight into one’s body enables controlling the changes in the physical state, and by the same token, it leads to mental relaxation. In the course of her own practical experiments, the author has changed the content of instructions in a simple story about animals, such as bears, with which children readily identify. Children personify a tired bear and try to feel like it. The commands have been simplified into two types of feelings: that of heaviness and that of warmth in the limbs. Almost all school children experienced positive relaxation, whereas children with mental retardation responded in different ways, mainly depending on their ability to focus on the content of the stories.

Some children reacted promptly, but failed to maintain their focus on the training. Opposite was true about others, who took long time to enter into the state of relaxation. It is important to observe children during sessions (open or clenched eyes, symptoms of reduced muscle tension, such as the lowering of the jaw). In children responding promptly, a positive impact on subsequent procedures was noted, but also in the cases of those who had failed to fully relax, there had been a discernible increase. The acquisition of the skills was subsequently demonstrated to children and the use of the therapy was accordingly encouraged. Pedagogical therapy, as a component of school education, constitutes its important constituent, which is always difficult to overestimate when working with children with learning difficulties.

The current school situation undergoes great changes within the realm of its early-school component. Six-year-old children have been enrolled into compulsory schooling. More emphasis has been put on regulations concerning the diagnosing children’s development at school and a wider range of problems has been included into the influence of psychopedagogical assistance.

A number of further changes have additionally increased the chances for school success in the cases of pupils with learning difficulties:

- educational packages for the years 1 to 3 feature new working methods, which often utilise elements from materials previously only devoted to specific learning difficulties and educational therapy, which

- now allows for individualisation of activities and for the requirements towards a varied assortment of pupils within one class,
- more attention is paid to different ways of exploring the world, to the child's current knowledge and interests,
 - technical potential has expanded, i.e. a variety of media aids and computer programs, to assist in the learning of reading, writing, spelling and maths, have been created, which in their own right take into account pupils' individual capabilities and their pace of work,
 - the awareness of the need to involve active forms of school work and to meet children's natural need for movement is slowly taking root,
 - descriptive assessment of school children, which is becoming more and more children-friendly, promotes motivation to participate in learning,
 - more active and inclusive forms of cooperation with parents are promoted.

In early school education, the expansion of the following initiatives will prove to be desirable:

- initial diagnosis of the whole class team in terms of their level of development of perceptual-motor functions, such as: speech and language, and in terms of early identification of hazards and delays/gaps in basic learning skills,
- it is important to undertake preventive measures not to allow for the formation of further difficulties,
- observation and special care towards pupils from dysfunctional backgrounds and from low social status families, who have learning difficulties, may further require further intensification,
- separate extra-curricular activities for children with learning difficulties should only be of complementary character and should take into account pupils' individual characteristics during class time; continuous cooperation between specialists and the teacher is as important as the inclusion of special educational influence in the course of regular school instruction.

The objective to maintain a common school educational stream for children with learning disabilities is now additionally combined with an additional possibility for them to benefit from direct learning environment, featuring their more efficient classmates. The inescapable individualisation of classroom procedures is now becoming institutionalised by a newly-sprung attitude of friendly cooperation and tolerance towards pupils with shortcomings arising from their difficulties in mastering the school material.

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