

УДК 159.922.7:159.946.4

DIAGNOSTIKOVANIE GRAFOMOTORICKÝCH SPÔSOBILOSTÍ DIEŤAŤA A DIAGNOSTICKÉ KOMPETENCIE UČITEĽA¹

Cabanová Mariana, Kasáčová Bronislava

Department of elementary and pre-school pedagogy, Faculty of Education,
Matej Bel University in Banská Bystrica, Slovenská republika
mariana.cabanova@umb.sk

Abstract: In her paper, the authoress deals with the topic of understanding pupils on the threshold of their education. She describes the importance of graphomotoric skills in the process of mastering the communication tool of writing. She focuses on possible causes of graphomotoric difficulties at the beginning of education. She points out the importance of teachers' diagnostic skills in education.

Key words: Graphomotoric Skills, Writting, Graphomotoric Difficulties, Teacher, Diagnostic.

Introduction. The meaning of the term “literacy“ has, in comparison with its original meaning of “the ability to read and write“, widened its conception. In to-

¹ The Study is an Output of the VEGA Project no. 1/0598/15 Titled Children at the Threshold of Education and their World, Lead by the Principal Solver prof. PhDr. Bronislava Kasáčová, CSc.

day's society one needs more than these abilities to succeed, despite this their mastering is crucial for further development.

Mastering of these two abilities poses the basal literacy of today's modern human being. A human being that has mastered the elementary technique of reading and writing is the very product of elementary education, although on this stage of education literacy is being closely connected with so-called trivium, which except from reading and writing includes also arithmetic. That is why the mastering of writing as a communication tool is often in one's concrete life situations the means that confirms his literacy. Apart from physiological, technical-hygienic and material preconditions, for mastering of writing a pupil needs certain mental preconditions. Experts claim that as far as demandingness and complexity of fine coordination of many muscle groups and brain structures is concerned, writing takes the second place immediately after speech.

Graphomotoric Skills and Writting at the Threshold of Education. Writing is a process, which is contingent on the level of child's perceptiveness, imaginativeness, memory and attention. The level of development of child's psychomotoric trait besides other factors influences mastering of writing as men's communication tool. And it is the diagnosing of psychomotoric trait that is connected with diagnosing of graphomotoric skills. Graphomotorics is the highest stage of development of child's psychomotoric personal traits and the developing of coarse and fine motorics must precede the development of this skill. That is precisely why well-developed graphomotorics is the fundament for the mastering of written communication competence. Průcha [1, p. 69] defines the term graphomotorics as a „set of mental activities performed by an individual when writing”. Among the basic school competences that should be adopted by a child from the beginning of compulsory education count reading and writing, but mainly the practice of these skills is what we have in mind when talking about literacy. „Through the basal literacy development of six year olds continues the overall development of literal literacy by the means of mastering the basic communication tool – handwriting“ [2, p. 28]. However, according to Zelinkova [3] reading and writing are not the goal, but the mean of further education. If the child is not able to adopt and automatize these competences in the first year of his school attendance, it has an impact on its further education, school performance and in the end on his assessment, which can influence the perception of his personality by himself, as well as by others.

The teaching of writing is apart from other factors based mainly on memory, in particular on the visual and motoric memory. The pupil has to remember the shape, size and name of each phone and has to create an association between the phone and the letter – between the sound and the shape. The fundamentals when teaching the skill of writing are visual and auditory perception. Through sensory perception followed by the correct visual-motoric activity arises child's competence to use the correct shapes of letters in the process of writing. According to Pardel [4, p.70] writing is a „process, which essence lies in the transformation of the heard, seen or spoken into a complex graphomotoric activity that results in written word, written speech, handwriting. “The writing became the means through which we pass on our knowledge to the next generations, but is also the mean to gain the information to pass on. The difficulties when adopting the competences that comprise the basal literacy in our system of education can be connected with insufficient development of their psychomotoric traits. The development of fine

motorics, which stands for deliberate and coordinated move that concern the skillfulness of the hand, proceeds parallelly with child's overall development and its constituent stages can differ throughout the process depending on the individual. A child with fine motorics problems often dislikes drawing, possibly avoids the drawing process or refuses to draw at all. Based on child's negative attitude towards this activity the development of fine motorics suffers significantly or doesn't reach the desired level. Coordination difficulties related to fine motorics become obvious until then they begin to negatively influence graphomotoric skills that are expected from the pupil from the beginning of school attendance.

The period of time, in which he should master the writing as a symbol of his culture and as a communication tool, is a time that puts high demands on his graphomotoric skills. Despite the practice of writing progresses from mechanical graphomotoric movements through the practice of individual graphemes up to connection of graphemes into syllables and words, not every pupil is able to cope with this process. In every class there are pupils that come across difficulties when dealing with writing. If the teacher doesn't diagnose the essence of the problem and its cause soon enough, the continual problem can have impact on pupil's school successfulness and his further development. The initial demonstrations of arising problems can appear as a "differentness" of a pupil in comparison with classmates and at the same time they can warn the teacher of a pupil with special educational needs.

Possible causes of graphomotoric difficulties.

Problems connected with adopting the skill of writing as a communication tool can have several, sometimes mutually connected, sources. This is why *differential diagnostics*, which serves for distinguishing of difficulties with identical demonstrations, but different causes, is needed for diagnosing of graphomotoric skills. The teacher should in the process of diagnosing pay close attention to each one of them, as this is the way in which he avoids erroneous conclusions and incorrect diagnosis. According to Kasáčová [5, p. 18] "for diagnosing of child's graphic expression we mainly use work sheets with specific task, or tasks, while the product of the child can be compared with a standard (standardized tasks) or with the products of his coevals, with the expected performance or rather with performance of the child himself achieved in a previous task." It is important to realize that the source of difficulties connected with graphomotoric skills can have various causes and consequences. These are several of them:

Dysgraphia, which we can interpret as a decrease of the ability to express one's thoughts through the means of writing. Medzi jej hlavné prejavy pri diagnostikovaní v prvom ročníku základnej školy podľa Zelinkovej (1994, s. 30) patria: according to Zelinkova [6, p. 30] among her main displays during the diagnosing process in the first year of elementary school belong:

- "incorrect, even convulsive holding of the writing equipment,
- the child is not able to perform continuous strokes,
- the child experiences difficulties when remembering and imitating the shapes of letters,
- in the dictated syllables or words the child writes just some of the words, especially those, which are acoustically significant for him or those, which he has been able to remember,

- the handwriting is rough, crabbed and the shapes of the letters are nearly unreadable.”

One of the first persons that are able to notice these difficulties is a teacher in the first year of study on the elementary school. This is why he should soon enough identify the symptoms of this disorder so that as soon as possible necessary steps that will lead to its elimination can be undertaken. Despite the fact that to diagnose this disorder are entitled the specialists from the pedagogical-psychological advisory centre, the teacher gets into the role, in which it is him who warns the parents of the situation that can result in this kind of diagnosis as it is him again who advises the parents to visit the pedagogical-psychological advisory centre. However the teacher becomes the person that should cooperate with the specialist to eliminate this disorder and the cooperation with the specialist should lead back to the teacher through providing him with appropriate procedures, interventions not only of “technical” character (i.e. how to proceed), but also with psychological consultancy – how to support the child when experiencing difficulties and how to cooperate with the parents in an appropriate and correct way.

Dyspraxia Dyspraxia. Graphomotoric difficulties connected with the hand disorder and point out to insufficiently developed fine motorics. In the school they appear in the form of crabbed and unreadable handwriting and in the slow pace when writing. The child has difficulties when learning the individual letters, however the clumsiness as well appears in the drawing, cutting, when manipulating with tiny objects, writing equipment and tools. The cause for these graphomotoric difficulties of a child could be late or slow development of the dominant hand definition. Graphomotoric difficulties of a child can prove in his drawing too.

When diagnosing the graphomotoric skills the teacher should continue to deal with the attitude, in point of fact with the relation of the child towards drawing and painting and he should also pay attention to the position of the body, holding of the pen (pencil) as well as the smoothness of the movement when writing.

Gifted children can as well have graphomotoric difficulties in the initial stage of their school attendance. At this time these children can already read and write in block letters. And it is the insufficiently developed graphomotorics that belongs to one of the problem characteristics that are connected with the intellectual endowment [7]

The teacher as the first diagnostician should know that graphomotoric ***difficulties could be one of the symptoms of ADHD***. It is the ADDH (ADHD) that is connected with dysfunctions in many individual mental functions such as perception, attention, thinking, motorics and their mutual coactions. It is necessary to mention that the teacher should avoid any conclusions and strict statements, which could lead to incorrect self-guidance of the child. We have to emphasize that to diagnose such disorders falls within the competence of specialists – psychologists.

In connection with the diagnosing of child's graphomotoric difficulties we cannot omit sources the teacher can detect through the familial anamnesis of the child. ***Familial environment with low level of stimulation*** can bear far-reaching consequences on the development of all his abilities. Such familial environment doesn't provide the child with sufficient amount of stimuli that would be found in the zone of his closest development and thus doesn't fulfil his needs and provides no support in his further development. This source of child's difficulties connected

with the beginning of compulsory school attendance considerably indicates the importance of familial anamnesis in relation to the further development of the child. Despite that many of them meet the criteria for entering the process of education, lot of them are substantially behind the average achieved by their coevals.

Neglecting familial environment. In such cases we consider important to watch for the physiological state of the child. Child's difficulties can be incurred by the visual or audile disorders that have been unnoticed by the family and are the main cause for child's difficulties connected with mastering of the school competences.

Capability and Competence of Diagnosing in Classroom

The complexity of diagnosing in the process of teaching resides in some problems arising from insufficiently defined up to missing ethical professional standards or principles. Although the teacher has to be a diagnostician, he doesn't have specifically delimited "sphere of activity", except for the "grading" in school, which is only a narrowed form of assessment phase of the diagnostic process. There are several factors that limit teacher's diagnostic competence and that definitely cast doubt on its justifiability or credibility:

- multifunctional character of teacher's profession,
- administrative limitations,
- denying of teacher's diagnostic competence,
- subjectivity of the teacher in the process of assessing,
- negative influence of some diagnostic methods on the child, especially in case of their incorrect application,
- untrustworthy handling of information concerning the familial environment of the pupils,
- unprofessional handling of information about children.

The teacher must possess the diagnostic skills and capabilities for performing this activity so that we can consider the diagnostic work of teachers to be carried out in a professional and expert way.

In English we come across the term *competence in classroom enquiry* [8, p. 14] that stands for the capability to enquire in the classroom (classroom enquiry), i.e. diagnosing. In the widest concept of this term we can distinguish between three basic types of capabilities, abilities or skills that are considered as diagnostic activity:

1. *the capability to gain information,*
2. *the capability to analyse information,*
3. *the capability to assess information.*

These together as an inseparable structure of skills and capabilities along with teacher's expertise form the diagnostic competence. It is a demanding, highly specialized and responsible activity with substantial requirements on ethics, because it is the source of increasing the teacher's capability, but the pedagogic decision making about the children in the classroom is dependent on it as well. It consists of three dimension [9] that pose dilemmatic questions on it:

- personal dimension – it means that the teacher wants and is willing to gain, analyse and assess information with the aim to improve his pedagogic work – *if he is and wants to be reflexive-diagnosing professional,*
- professional dimension- it means the teacher is familiar with and is able to use and develop tools of pedagogic diagnosing – diagnostic methods and knows how to util-

ize the gained results for improving the quality and development of pedagogic activities – if he knows and manages to be *reflexive-diagnosing professional*,

- ethical dimension – it means the teacher is aware of ethical principles and standards when utilising the information about pupils, is unbiased when analysing them and impartial when assessing these information – if he can conceive himself as a *reflexive-diagnosing professional*.

Conclusion. A correct start of a child at school is an important milestone that influences his future attitude towards the school, learning, the world of cognition and generally success in the life. Graphomotoric activities and writing is a very important task for a little pupil he has to deal with. Crucial is that the adults provide enough support in this struggle so that writing will not become a “nightmare“, but an opportunity for self-realization and self-revelation. In year 1999, authoresses Oberhuemer, Colberg-Schrader [10] referred in their study to the fact that the profession of early education teachers nowadays faces its most challenging changes. The publication of OECD [11] states several basic examples of changes within the role of teachers. For example, at the level of single student, teachers should be able: to initiate and manage the education process, respond to individual education needs of their students. All this requires them to possess a lot of competences, knowledge and skills they should put into use effectively in order to assure each of their students achieves maximum during the education process. Early education practitioners are actively encouraged to explore and develop their role. They are now required to respond to individual family needs and have a wide knowledge of child development, and critically examine their own professional world. [12]

Bibliography:

1. Průcha, J., Walterová, E., Mareš, J. 2003. *Pedagogický slovník*. Praha: Portál, 2003. ISBN 80-7178-72-8.
2. Ďurošová, E. 2005. *Rozvíjanie bazálnej gramotnosti detí z menej podnetného sociálneho a kultúrneho prostredia. I. časť*. Banská Bystrica: PF UMB, 2005. ISBN 80-8083-060-6.
3. Zelinková, O. 1994. *Poruchy učení*. Praha: Portál, 1994. ISBN 80-7178-096-0.
4. Pardel, T. 1966. *Písaná reč, jej vývin a poruchy u detí*. Bratislava: SPN, 1966.
5. Kasáčová, B., Cabanová, m. 2011. *Pedagogická diagnostika. Teória a metódy diagnostikovania v elementárnom vzdelávaní*. Banská Bystrica: PF UMB, 2015.
6. Zelinková, O. 1994. *Poruchy učení*. Praha : Portál, 1994. ISBN 80-7178-096-0
7. Jurášková, J., Dočkal, V. 2005. *Výchovno-vzdelávací program žiaka so špeciálnymi výchovno-vzdelávacími potrebami v základnej škole. Program pre intelektovo nadaného žiaka*.
8. Pollard, A. *Reflective Teaching in the Primary School*. London: Cassell, 1998.
9. Kasáčová, B. *Učiteľ. Profesia a príprava*. Banská Bystrica : PF UMB, 2002.
10. Oberhuemer, P., Colberg-Schrader, H. 1999. The Changing Practitioner Role in Early Childhood Centres: multiple shifts and contradictory forces. In *International Journal of Early Years Education*, Vol. 7, No. 3, 1999.
11. OECD. 2005. *Teachers Matter Attracting, Developing and Retaining effective teachers*. [on-line]. [2006-3-13] Retrieved at: <http://www.keepeek.com/digital-asset->
12. Reed, M, Walker, R. 2015. *An Introduction to Early childhood*. London: Sage, 2015.