Identifying learning difficulties and adapting history lessons to pupils with dyslexia in primary schools

Pupils with dyslexia belong to a group of children with learning disabilities, whose problems are seen as reading and writing disorders. Due to their difficulties in reading, writing, and processing information, their problems with dyslexia are also visible in history lessons in primary schools. With the help of empirical research and survey responses of history teachers from primary schools in northeastern Slovenia, we found that history teachers recognize some learning difficulties of pupils with dyslexia. These can be seen in achieving the minimum standards of the goals of the history curriculum, taking into account their shortcomings and trying to help them with didactic and methodological adjustments in teaching (in particular in the methods of interpretation, and in evaluating and assessing knowledge). However, we suggest that history teachers constantly improve their professional skills, as this is the only way they can better adjust history lessons to pupils with dyslexia.

Key words: primary school, history lessons, learning difficulties, pupils with dyslexia, lesson adjustments, differentiated lessons

1. Introduction

“The term ‘specific learning difficulties’ means a heterogeneous group of deficits manifested by early developmental delays and/or difficulties in any of the following areas: attention, memory, cognition, coordination, communication (language, speech), reading, writing, spelling, arithmetic, social competences and emotional maturity.”1 It is essential to detect such deficits early in their childhood or early adolescence, as various didactic approaches can alleviate the difficulties and facilitate the pupil’s daily life.

Dyslexia is one of the most common specific deficits at the level of auditory-visual processes. It is a combination of disorders and problems that affects the learning process of reading and/or spelling and correct spelling.2 As a reading and writing


2 Stane Košir et al., Navodila za prilagojeno izvajanje programa osnovne šole z dodatno strokovno pomočjo: primanjkljaji na posameznih področjih učenja [Instructions for the Adapted Implementation of the Primary
disorder, dyslexia is evident mainly in pupils’ slower information processing, problems with short-term memory, correct sequence expression, auditory and visual perceptions, difficult oral expression and poor motor skills, and problems in phonological awareness, reading memory, and the speed of verbal processing, mechanical coordination, concentration and personal organisation.

The main problems that people with dyslexia have are difficulties in cognitive processes (perception and information processing), problems with information perception (awareness of sounds and recalling connections between letters and sounds), difficulties in perceiving and separating individual sounds in a word (phonological awareness and phonological separation, which causes difficulties in reading with the help of the alphabetic system), problems in perceiving specific characteristics of individual letters or words (reversing the order of letters, e.g., n-m; b-p; d-t, the intrusion of sounds/letters, the omission of sounds/letters), difficulties in processing information (due to short-term or working memory failure, e.g., memorising instructions, understanding and integrating) or difficulties in demonstrating one’s knowledge (or in quickly demonstrating one’s knowledge and managing time in limited working conditions).

These problems also occur while studying history in primary school. Thus, the article explores the objectives in the history curriculum where primary school teachers identify the various learning difficulties of pupils with dyslexia and the ways to help and adjustments they can use in teaching these pupils history.

It also presents the findings of a short empirical research study in which we tried to determine which learning difficulties the history teachers most often recognise in pupils with dyslexia and how they adjust history lessons in primary schools in Slovenia.

2. The teacher’s diagnosis and recognition of dyslexia in history teaching in primary school

The shortcomings of pupils with dyslexia can cause problems in history lessons as well, mainly due to the increased volume of material, understanding and the need to connect concepts across the teaching content.

History is a compulsory subject in primary school in Slovenia from the 6th to the 9th grade, for which the curriculum prescribes a certain number of hours (i.e., 239


3 Ibid.


5 Cirila Peklaj, Učenci z učnimi težavami v šoli in kaj lahko stori učitelj [Pupils with Learning Difficulties at School and What a Teacher Can Do], 2nd Ed. (Ljubljana: Znanstvena založba Filozofske fakultete, 2016), 38–39.
hours) and a certain number of topics. In addition to the content, pupils are expected to achieve functional and educational curriculum goals. The primary school curricular reform included significant didactic and methodological changes in the history curriculum in primary schools only a few years after Slovenia had achieved its independence, and it was given a legal basis in 1996 by the Primary School Act. A further updating of the curriculum took place between 2006 and 2008, which was implemented in 2011 with content and reductional corrections to the curriculum.

The current history curriculum in primary school, adopted in 2011, is based on the process and development approach. This approach encourages pupils’ active role in history lessons, intending to increase the quality of acquired knowledge by developing different thinking strategies, which is quite the opposite to previously established traditional approaches based on memorisation.

The curriculum encourages teachers to make historical knowledge topical to prepare pupils for an active and responsible engagement with the modern world and to work with external institutions to develop a positive attitude towards preserving and evaluating cultural heritage. One of the key tasks of history lessons is to „acquire the knowledge of the most important events, phenomena and processes in the military, political, economic, social and cultural areas of the world, European and national histories."

History lessons are based on three aspects: the content aspect, which gives pupils the knowledge and understanding of the past; the methodological aspect, where pupils analyse and evaluate historical events, various information and interpretations; and the educational aspect, which enables the acquisition of knowledge in preparation for the society, active citizenship and better understanding of international trends. For Trškan, the development of historical skills is among the essential tasks of history teaching, such as identifying causes and consequences, determining the

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12 Ibid.
Dyslexia as a specific learning difficulty can be an obstacle for history teachers to achieve the goals of the history curriculum if they lack the expertise and training/qualification to adjust lessons for pupils with dyslexia. Although dyslexia has a neurological origin, pupils can successfully cope with it if it is identified and treated early enough. Therefore, recognition, education about modern diagnostic approaches and teachers’ and other educators’ knowledge are essential for the smooth functioning of the whole class. Identifying pupils with dyslexia is demanding due to the aspects and goals of each individual subject. However, there is a possibility for a child with dyslexia to be brought up to the level of expected, productive functioning in the classroom with a timely diagnosis and an appropriate help.

Depending on the difficulties of pupils with dyslexia, teachers may notice certain deficits or disorders in specific subject skills. Thus, history teachers can diagnose pupils with dyslexia on the basis of their underachievement of the minimum standards of the required skills and competences. In all the elective and compulsory contents of the history curriculum, particular learning objectives are achieved. They refer to the aforementioned development of skills and competences such as temporal visualisation; spatial visualisation; collecting and selecting essential information and evidence from various historical sources and literature; the memorisation of specific years and historical events; the ability to understand the causes, processes and consequences of specific historical events from various historical sources and literature; the ability to understand the causes, process and consequences of specific historical events with the teacher’s explanation; the ability to search for historical sources and literature with the help of IT; the ability to use basic historical terminology; the ability to assess historical events critically; and the ability to form independent conclusions, opinions, views and solutions. Based on these skills, teachers can judge whether pupils have achieved certain learning objectives and the related standards of knowledge.
3. Adjusting history lessons to pupils with dyslexia

3.1. The teacher’s role

Given the subject-specific didactic aspects of understanding dyslexia and the aims of the history curriculum, the main task of the history teacher is to adapt teaching methods to pupils with dyslexia, provide them with assistance and inclusive work in the pedagogical process, together with other educators.

History teachers can help pupils with dyslexia primarily by providing diversity in the teaching process and maintaining an appropriate uniform level of difficulty.17 Teachers should adapt the lesson to pupils with dyslexia with regard to the study structure and knowledge and skills consolidation. They ought to enable multisensory learning and include adaptations in the metacognitive field.18

The teaching structure is characterised by the fact that it must occur in a logical sequence, in small, interconnected steps, so that pupils can readily imagine and understand a particular topic. „Multisensory“ means that the teaching of pupils with dyslexia has to be active, interactive, combining as many different modalities as possible, such as sight, hearing, touch, and kinaesthesia. Pupils with dyslexia need to practise their skills to preserve them in their long-term memory. In doing so, studying should not only focus on the teacher providing certain information but also on learning the skills that the pupil will later be able to transfer to other areas of knowledge. From the metacognitive point of view, pupils with dyslexia should also learn to think about thinking, which allows for understanding, knowledge transfer and skills development.19

The correct sequence and division of the study content into individual parts are vital, as well as active teaching methods and consideration for the pupils’ interests. Among other things, this includes holding pupils in high self-esteem and positive experience of themselves as readers, shifting their focus on dealing with problems and the use of their strengths (e.g., the ability to think visually, the visual-spatial ability, etc.).20

3.2. The forms of help and adaptations for pupils with dyslexia in history lessons

According to the general didactic and methodological principles of teaching, the forms of help and adjustment for pupils with dyslexia in history lessons are important for several aspects. Any adjustment can be a powerful tool for an individual pupil with dyslexia in solving reading and writing problems.

18 Gavin Reid ed., Dyslexia: A Practitioner’s Handbook (Chichester, Hoboken: Wiley), 149-189. Published in Žagar, Drugačni učenci [Different Students], 42.
19 Ibid., 42-43.
20 Magajna et al., Učne težave v osnovni šoli: koncept dela [Learning Difficulties in Primary School: The Concept of Work], 46-47.
Experts define the forms and adjustments for pupils with dyslexia as follows:

- **The forms of help and adjustments from the organisational point of view** are based on the adjustments of the learning environment,\(^{21}\) organisation of time\(^{22}\) and adjustments with didactic aids and materials.\(^{23}\)

- **The forms of help and adaptation in the individual stages of the lesson**, where adjustments are visible in the stage of motivation and introduction,\(^{24}\) the introduction of a new study material,\(^{25}\) training or practice,\(^{26}\) repetition, and knowledge evaluation and assessment.\(^{27}\)

- **The forms of help and adaptation in individual tasks regarding the teaching content**, where according to the analysis of didactic materials, the following

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24 Reid, Green, 100 idej v pomoč učencem z disleksijo [100 Ideas to Help Students with Dyslexia], 17-18, 69.

25 Magajna et al., Učne težave v osnovni šoli: koncept dela [Learning Difficulties in Primary School: The Concept of Work], 43.; Peklaj, Učenci z učnimi težavami v šoli in kaj lahko storite učitelj [Pupils with Learning Difficulties at School and What a Teacher Can Do], 41-42.; The summary and adaptation of the forms of help are based on Pavlin, Pezdir, Skodlar, Slabe, Pomoč in podpora učitelju za delo z učenci z disleksijo. Priročnik [Help and Support for the Teachers Who Work with Pupils with Dyslexia. Manual], 6-7, 12.; Reid, Green, 100 idej v pomoč učencem z disleksijo [100 Ideas to Help Students with Dyslexia], 27, 30, 41.


types of tasks are appropriate: tasks with visual material,\textsuperscript{28} auditory tasks,\textsuperscript{29} tasks with moving images,\textsuperscript{30} experiential learning (role play)\textsuperscript{31} and didactic games and tasks.\textsuperscript{32} When selecting specific tasks, the teacher should know the pupil’s learning style and correctly assess the suitability of individual tasks.\textsuperscript{33}

- **The forms of help and adjustment in teaching strategies** that affect how pupils with dyslexia learn and depend on each pupil, such as visualisation,\textsuperscript{34} Pauk’s teaching strategy,\textsuperscript{35} and KWL strategy (Know, Want-to-know and Learned).\textsuperscript{36}

- **Other didactic and methodological adaptations for pupils with dyslexia**, such as soft skills (e.g., occasional physical proximity or touch (hand on shoulder), more frequent eye contact before giving important information, asking questions that encourage pupil self-evaluation, learning self-control strategies)\textsuperscript{37} and the forms of out-of-class help with the help of additional professional help from a school psychologist, a special education teacher or a school pedagogue.\textsuperscript{38}

\begin{itemize}
  \item \textsuperscript{29} Harris, Luff, 2004. Published in Staša Ivanec, *Vloga in usposobljenost učiteljev za prepoznavanje in odpravljanje učnih težav pri pouku zgodovine v osnovni šoli*, doktorska disertacija [The Role and Qualification of Teachers in Recognising and Overcoming the Learning Difficulties in History at Elementary School. Doctoral Dissertation] (Ljubljana: Filozofska fakulteta, 2015), 156.; Žagar, Drugačni učenci [Different Students], 44.
  \item \textsuperscript{32} The example was based on Reid, Green, 100 idej v pomoč učencem z disleksijo [100 Ideas to Help Students with Dyslexia], 57.; The examples were based on Mirjanić, Žagelj, Verdev, Zuljan, *Raziskujem preteklost 8. Priročnik za učitelje za zgodovino za 8. razred osnovne šole* [Researching the Past 8. A Handbook for the 8\textsuperscript{th} Grade Primary School History Teachers], 7, 30, 79.; Alja Lečnik, Saša Schweiger, Maja Suštaršič, *Priročnik za učence z disleksijo* [A Handbook for Pupils with Dyslexia] (Ljubljana: Pedagoška fakulteta, 2015), 23. http://ijosmn.radece.si/images/doc-os/2020-21/prirocnik_disleksija.pdf (Accessed 15. 8. 2019.)
  \item \textsuperscript{34} The example was based on Reid, Green, 100 idej v pomoč učencem z disleksijo [100 Ideas to Help Students with Dyslexia], 53.
  \item \textsuperscript{35} Alja Lečnik, Saša Schweiger, Maja Suštaršič, *Priročnik za učence z disleksijo* [A Handbook for Pupils with Dyslexia], 52.
  \item \textsuperscript{36} Ibid., 52, 55.
  \item \textsuperscript{37} Magajna et al., *Učne težave v osnovni šoli: koncept dela* [Learning Difficulties in Primary School: The Concept of Work], 25-26.
  \item \textsuperscript{38} Ibid., 43-44.; The forms of help are summarised and adapted from Amalija Žakelj, Milena Valenčič Zuljan, *Učenci z učnimi težavami pri matematiki: prepoznavanje učnih težav in model pomoči* [Pupils with
The teacher ought to be professionally trained to identify pupils with dyslexia and appropriately adjust lessons for them. Organising and adapting lessons is very demanding from the perspective of practical work in the classroom and the requirements for achieving the curriculum goals. In addition to their professional competences acquired during their studies, teachers need to improve their expertise continuously, thus enabling the stable, successful work in the classroom and alleviating pupil’s daily uncertainties and learning difficulties.\(^{39}\)

4. Methodology

4.1. Research purpose and objectives

With the help of the empirical research, we wanted to observe the opinions of history teachers about the learning difficulties of pupils with dyslexia and the adaptations of history lessons in primary schools in Slovenia. The entire research study is published in the master’s thesis *Učenci z disleksijo pri pouku zgodovine v osnovni šoli [Pupils with Dyslexia in History Lessons in Primary School]*.\(^{40}\) In this paper, we decided to present the part of the research that covers the teacher’s identification of the learning difficulties of pupils with dyslexia in history lessons and the use of the different forms of help and ways to adapt lessons to different history topics and grades (6\(^{\text{th}}\), 7\(^{\text{th}}\), 8\(^{\text{th}}\), 9\(^{\text{th}}\) grades) in primary school in Slovenia.

4.2. Research questions and hypotheses

In line with the stated theoretical starting points, we wanted to answer the following specific research questions with the help of a questionnaire for history teachers in primary schools:

- In which learning objectives from the primary school curriculum related to competences and historical skills do history teachers most often recognise learning difficulties in pupils with dyslexia?
- In which history curriculum topics from the 6\(^{\text{th}}\) to the 9\(^{\text{th}}\) grades do history teachers notice the most significant problems in pupils with dyslexia?
- What are the most common forms of help used by history teachers in their lessons from the organisational perspective?

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\(^{39}\) Košir et al., *Navodila za prilagojeno izvajanje programa osnovne šole z dodatno strokovno pomočjo: primanjkljaji na posameznih področjih učenja [Instructions for the Adapted Implementation of the Primary School Programme with Additional Professional Assistance: Deficiencies in Individual Areas of Learning]*, 6, 9, 23.

\(^{40}\) Bezjak, *Učenci z disleksijo pri pouku zgodovine v osnovni šoli [Pupils with Dyslexia in History Lessons in Primary School]*.
• What are the most visible teachers’ adjustments in individual stages in history lessons?
• What teaching methods do history teachers most often use for pupils with dyslexia in history lessons?

According to the reviewed literature, we formulated the following hypotheses:

H1: History teachers most often recognise the learning difficulties of pupils with dyslexia in history lessons in those curriculum learning objectives that relate to skills such as the ability to use basic historical terminology, the ability to evaluate historical events, phenomena and processes critically, and the ability to understand the causes, processes and consequences of specific historical events from various historical sources and literature.

H2: Given the difficulty of the teaching content, we assumed that pupils with dyslexia would have the most problems in the 6th grade with the topic „The beginning of science, art and belief“; in the 7th grade with the topic „The Middle Ages – creating a new cultural and political image of the world“; in the 8th grade with the topic „The borders of the known world expand“; and in the 9th grade with the topic „Slovenes in the 20th and 21st centuries“. These topics have a wide range and, in addition to cultural history, include political history, which requires pupils to have a good memory, understand causes and effects and sequence events logically and chronologically.

H3: We assumed that history teachers most often adapted teaching materials for pupils with dyslexia, using coloured paper, matt paper and A3 size paper.

H4: We assumed that history teachers did not specifically adjust the stage of motivation/introduction and that teachers most often use the same motivation for all pupils in the new subject matter. We hypothesised that history teachers most often adapted the lesson by adjusting speech and language to pupils with dyslexia (using more straightforward sentences, deeper explaining of the concepts and highlighting the essence) when dealing with a new subject matter. We anticipated that history teachers would constantly adjust the practice stage to help pupils with dyslexia with problems such as misunderstanding, having difficulty memorizing what was read and following instructions by offering additional explanation. During repetition, we assumed that history teachers asked pupils with dyslexia repetition questions that related to the essence of the new subject matter. In the evaluation and assessment stage, we assumed that history teachers adapted their lessons to pupils with dyslexia by using continuous evaluation and assessment of knowledge.

H5: Given the abilities of pupils with dyslexia (multidimensional and multisensory learning, pictorial and spatial visualisation), we assumed that teachers most often used the method of working with visual sources, the method of visual presentation, the method of experiential learning (role play) and the method of working with moving images (video).
4.3. The description of research methodology

4.3.1 The description of data collection techniques and methods

We used a descriptive and causal non-experimental method of pedagogical research. The data were obtained with the help of the questionnaires which were used to interview primary school history teachers.

4.3.2 The description of the process and the method of data collection

We used a questionnaire to collect the data that met the measurement characteristics of validity, reliability and objectivity. The questionnaire for the responding history teachers was partially adjusted according to our research needs from Staša Ivanec’s41 doctoral dissertation, which dealt with the role and training of history teachers in recognising and solving learning difficulties in history teaching in primary school. The questionnaire featured dichotomous questions and multi-choice questions (questions with ranked answers, graded answers and a combination of attitudes and levels).

The study was conducted in cooperation with the administration of primary schools from the regions of Podravje and Pomurje. We also asked the history teachers to answer questionnaires by email, which had to include an attached agreement statement for the study from their school administration as well. The questionnaire was emailed to the official online addresses and administration offices of all primary schools in Podravje and Pomurje. The questionnaire was activated via the website www.1ka.si. The data were collected for one month, from 18 April 2017 to 18 May 2017.

4.3.3 The description of the sample

The primary population was represented by primary school history teachers from Podravje and Pomurje, with 32 history teachers from Podravje (80%) and 8 history teachers from Pomurje (20%). These regions were chosen because of their distance from the centre of the country. Due to their neighbouring location, we considered them as one single region in the research. The sample used in the research is non-random and represents 40 people, of whom 8 are male history teachers (20%) and 32 are female history teachers (80%). At the time of the survey, four history teachers did not have a professional title (10%), six teachers had the title of mentor/mentor (15%), 28 teachers had the title of teacher advisor/svetovalec (70%), and two teachers had the title of teacher expert/svetnik (5%). Two history teachers had 0–2 years of service (5%), four teachers had 3–10 years (10%), 18 teachers had 11–20 years, ten teachers had 21–30 years (25%) and six history teachers had over 31 years (15%) of service. The survey involved 25 history teachers from schools with fewer than 350 pupils (62.5%), 12 history teachers from schools with 350 to 650 pupils (30%) and three history teachers from schools with more than 650 pupils (7.5%).

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41 Ivanec, Vloga in usposobljenost učiteljev za prepoznavanje in odpravljanje učnih težav pri pouku zgoda-vine v osnovni šoli [The Role and Qualification of Teachers in Recognising and Overcoming the Learning Difficulties in History at Elementary School].
4.3.4 The description of data processing

In data processing, we used basic statistical methods for each research question – descriptive statistics (frequencies, percentage frequencies, mean values, averages). The data were processed using the 1ka (www.1ka.si) online tool and arranged in the form of frequency distribution.

5. Results and interpretation

5.1. In which learning objectives from the primary school curriculum related to competences and historical skills do history teachers most often recognise learning difficulties in pupils with dyslexia?

Table 1. Identifying the learning difficulties of pupils with dyslexia in the objectives of the primary school curriculum related to competences and historical skills

<table>
<thead>
<tr>
<th>Identifying the learning difficulties of pupils with dyslexia in the objectives of the primary school curriculum related to competences and historical skills</th>
<th>Answers</th>
<th>Arithmetic mean = Σx/n</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skills of collecting and selecting essential information and evidence from various historical sources and literature (pictures, maps, written sources, etc.).</td>
<td>1 – never</td>
<td>0 (0%)</td>
<td>3.4</td>
</tr>
<tr>
<td></td>
<td>2 – sometimes</td>
<td>4 (17%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 – occasionally</td>
<td>7 (29%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 – often</td>
<td>12 (50%)</td>
<td></td>
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<tr>
<td></td>
<td>5 – always</td>
<td>1 (4%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>24 (100%)</td>
<td></td>
</tr>
<tr>
<td>Ability to understand the causes, processes and consequences of certain historical events from various historical sources and literature.</td>
<td>1 – never</td>
<td>0 (0%)</td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>2 – sometimes</td>
<td>6 (25%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3 – occasionally</td>
<td>6 (25%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4 – often</td>
<td>10 (42%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5 – always</td>
<td>2 (8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>24 (100%)</td>
<td></td>
</tr>
<tr>
<td>Spatial perception.</td>
<td>1 – never</td>
<td>1 (4%)</td>
<td>3.1</td>
</tr>
<tr>
<td></td>
<td>2 – sometimes</td>
<td>7 (29%)</td>
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<td>3 – occasionally</td>
<td>7 (29%)</td>
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<td>4 – often</td>
<td>7 (29%)</td>
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<td></td>
<td>5 – always</td>
<td>2 (8%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>24 (100%)</td>
<td></td>
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<tr>
<td>Ability to form independent conclusions, opinions, attitudes and solutions.</td>
<td>1 – never</td>
<td>3 (13%)</td>
<td>3.0</td>
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<td></td>
<td>2 – sometimes</td>
<td>7 (30%)</td>
<td></td>
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<tr>
<td></td>
<td>3 – occasionally</td>
<td>3 (13%)</td>
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<tr>
<td></td>
<td>4 – often</td>
<td>8 (35%)</td>
<td></td>
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<tr>
<td></td>
<td>5 – always</td>
<td>2 (9%)</td>
<td></td>
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<tr>
<td></td>
<td>total</td>
<td>23 (100%)</td>
<td></td>
</tr>
<tr>
<td>Ability to search for historical sources and literature using IT.</td>
<td>1 – never</td>
<td>1 (4%)</td>
<td>3.0</td>
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<td></td>
<td>2 – sometimes</td>
<td>5 (21%)</td>
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<tr>
<td></td>
<td>3 – occasionally</td>
<td>11 (46%)</td>
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<td></td>
<td>4 – often</td>
<td>6 (25%)</td>
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<td></td>
<td>5 – always</td>
<td>1 (4%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>24 (100%)</td>
<td></td>
</tr>
<tr>
<td>Exhibiting various forms of communication for presenting knowledge (orally, in writing, graphically, illustratively or using IT).</td>
<td>1 – never</td>
<td>0 (0%)</td>
<td>3.0</td>
</tr>
<tr>
<td></td>
<td>2 – sometimes</td>
<td>6 (26%)</td>
<td></td>
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<tr>
<td></td>
<td>3 – occasionally</td>
<td>11 (48%)</td>
<td></td>
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<tr>
<td></td>
<td>4 – often</td>
<td>6 (26%)</td>
<td></td>
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<tr>
<td></td>
<td>5 – always</td>
<td>0 (0%)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>total</td>
<td>23 (100%)</td>
<td></td>
</tr>
</tbody>
</table>
The responding history teachers’ answers showed that they most frequently recognised learning difficulties in pupils with dyslexia in the following learning objectives: the skills of collecting and selecting essential information and evidence from various historical sources and literature (pictures, maps, written sources, etc.) \((\bar{x} = 3.4)\); the ability to understand the causes, processes and consequences of specific historical events from various historical sources and literature \((\bar{x} = 3.3)\) as well as spatial perception \((\bar{x} = 3.1)\).

The least frequently identified learning difficulties were the skill of temporal perception \((\bar{x} = 2.7)\) and the ability to understand the causes, processes and consequences of specific historical events with the help of teacher’s explanation \((\bar{x} = 2.7)\).

Based on the collected data, H1 could be only partially confirmed, as the data shows that the teachers recognised learning difficulties in the skills of understanding the causes, processes and consequences of specific historical events from various historical sources and literature \((\bar{x} = 3.4)\), but they did slightly less so in the expected skills of using basic historical terminology \((\bar{x} = 2.9)\) and assessing historical events, phenomena and processes critically \((\bar{x} = 2.8)\).

5.2. In which history curriculum topics from the 6th to the 9th grades do history teachers notice the most significant problems in pupils with dyslexia?

The responses show that the history teachers had detected pupils’ problems with dyslexia in multiple learning topics. The teachers’ answers are presented by individual classes.

The teachers’ answers show that they perceived learning difficulties in pupils with dyslexia in the 6th grade of primary school in the learning topics „The beginning of science, art and belief“ \((\bar{x} = 2.8)\), „The human thinks, creates and builds“ \((\bar{x} = 2.5)\), „Remnants of
the past (learning about history) (x̄ = 2.5) and „Lifestyle“ (x̄ = 2.5). H2 can be confirmed for the 6th grade, as we had correctly assumed that pupils’ most common problems occurred in the learning content „The beginning of science, art and belief“.

The responses show that the history teachers perceived learning difficulties in pupils with dyslexia in the 7th grade of primary school in the learning topics „The cultural image of non-European peoples“ (x̄ = 3.2), „The Mediterranean – a space of cooperation and contradictions between cultures“ (x̄ = 3.1), „The Roman state“ (x̄ = 3.0) and „The Middle Ages – the formation of a new cultural and political image of the world“ (x̄ = 3.0). H2 cannot be confirmed for the 7th grade, as most teachers opted for the teaching content „The cultural image of non-European peoples“. However, we can confirm that the theme of „The Middle Ages – the formation of a new cultural and political image of the world“ was one where the history teachers recognised a number of problems in pupils with dyslexia.

The responses show that the history teachers perceived learning difficulties in pupils with dyslexia in the 8th grade of primary school in the learning topics „A new look on the world and the human“ (x̄ = 2.9), „Modern rulers and their countries“ (x̄ = 2.9), „The rise of the bourgeoisie“ (x̄ = 2.9) and „Art in the 19th century“ (x̄ = 2.9). H2 cannot be confirmed for the 8th grade, as we had hypothesised that pupils with dyslexia had the most common learning difficulties with the topic „The boundaries of the known world expand“ (x̄ = 2.7).

The teachers’ answers show that they perceived learning difficulties in pupils with dyslexia in the 9th grade of primary school in the learning topics „Slovenes in the 20th and 21st centuries“ (x̄ = 2.9), „Political characteristics of the 20th century“ (x̄ = 2.9) and „Economic changes in the 20th and 21st centuries“ (x̄ = 2.8). H2 can be confirmed for the 9th grade, as we had assumed that pupils with dyslexia had the most problems with the topic of „Slovenes in the 20th and 21st centuries“.

5.3. What are the most common forms of help used by history teachers in their lessons from the organisational perspective?

Table 2. Forms of help used by teachers in history lessons from the organisational perspective

<table>
<thead>
<tr>
<th>Forms of help used by teachers in history lessons from the organisational perspective</th>
<th>Answers</th>
<th>Arithmetic mean = x̄</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 – never</td>
<td>2 – sometimes</td>
<td>3 – occasionally</td>
</tr>
<tr>
<td>The date of the oral examination is always set in advance for pupils with dyslexia.</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
</tr>
</tbody>
</table>
### Forms of help used by teachers in history lessons from the organisational perspective

<table>
<thead>
<tr>
<th></th>
<th>Answers</th>
<th>Arithmetic mean $\bar{x}$</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Offering more frequent breaks and extended writing time for assessment tests.</td>
<td>1 (5%)</td>
<td>4.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Avoiding exposing pupils in front of the whole class (reading aloud, etc.)</td>
<td>0 (0%)</td>
<td>4.1</td>
<td>1.0</td>
</tr>
<tr>
<td>Adaptations of the studying environment (seating order, a quiet corner – a retreat space, bright classroom, etc.)</td>
<td>0 (0%)</td>
<td>3.9</td>
<td>0.9</td>
</tr>
<tr>
<td>Adaptations of teaching materials – use of coloured paper, matt paper, A3-size paper, etc.</td>
<td>0 (0%)</td>
<td>3.9</td>
<td>0.9</td>
</tr>
<tr>
<td>The page layout with a lot of space, a larger and more visible font.</td>
<td>0 (0%)</td>
<td>3.9</td>
<td>1.0</td>
</tr>
<tr>
<td>Handouts or copies of notes or longer texts for pupils with dyslexia.</td>
<td>0 (0%)</td>
<td>3.6</td>
<td>0.9</td>
</tr>
<tr>
<td>Adaptations made by the use of teaching aids (coloured ruler for pupils with dyslexia, number strip, etc.)</td>
<td>2 (10%)</td>
<td>3.5</td>
<td>1.4</td>
</tr>
<tr>
<td>Text simplification and colour coding.</td>
<td>0 (0%)</td>
<td>3.4</td>
<td>0.8</td>
</tr>
<tr>
<td>Evaluation and assessment of knowledge outside the classroom.</td>
<td>4 (19%)</td>
<td>3.4</td>
<td>1.5</td>
</tr>
<tr>
<td>Substituting the writing assessment with an oral one.</td>
<td>3 (14%)</td>
<td>3.3</td>
<td>1.5</td>
</tr>
<tr>
<td>An educational specialist who helps them in class.</td>
<td>10 (48%)</td>
<td>2.2</td>
<td>1.4</td>
</tr>
<tr>
<td>Allowing pupils to write the material on a computer.</td>
<td>10 (48%)</td>
<td>2.1</td>
<td>1.4</td>
</tr>
<tr>
<td>Assistance in class by a school counsellor.</td>
<td>10 (48%)</td>
<td>2.0</td>
<td>1.3</td>
</tr>
</tbody>
</table>

The forms of organisational support most often provided by the history teachers to dyslexic pupils were ranked according to the calculation of arithmetic means.

We found that the history teachers set the dates of oral examinations for pupils with dyslexia in advance ($\bar{x} = 4.8$), allowed them more frequent breaks and extended time for writing tests ($\bar{x} = 4.6$), avoided exposing pupils (reading aloud, etc.) ($\bar{x} = 4.1$), adapted the learning environment (seating order, a quiet corner – a retreat space, bright classroom, etc.) ($\bar{x} = 3.9$) and used teaching materials – coloured paper, matt paper and A3-size paper ($\bar{x} = 3.9$), paid attention to the page layout with a lot of space, larger and more visible font ($\bar{x} = 3.9$). H3 cannot be confirmed, as the
responses showed that the history teachers most often pre-determined the oral examination date for pupils with dyslexia, but did not adjust teaching materials – used coloured paper, matt paper, A3-size paper – as often as predicted in the hypothesis.

5.4. What are the most visible teachers’ adaptations in individual stages in history lessons?

The responses showed that the history teachers did not exactly modify the motivation and introduction stage for pupils with dyslexia. They most often claimed that in this stage the presentation of the purpose or lesson objectives was the same for all pupils ($\bar{x} = 2.7$). That was followed by the statement that the presentation of the content of the lesson was the same for all pupils ($\bar{x} = 2.5$) and the statement that the motivation for the new subject matter was the same for all pupils ($\bar{x} = 2.4$). H4 for the motivation and introduction stage cannot be fully confirmed because most teachers opted for the answer stating that the presentation of the purpose or lesson objectives was the same for all pupils ($\bar{x} = 2.7$) and not for the predicted statement that the motivation for the new subject matter was the same for all pupils ($\bar{x} = 2.4$).

The most common adaptations in the stage of the introduction of a new study material as reported by the responding history teachers were the presentation of the material in a systematic and straightforward manner ($\bar{x} = 2.7$) and the exploitation of the pupils’ strengths (good visual thinking and the visual-spatial ability – allowing pupils with dyslexia to use maps and visual material) ($\bar{x} = 2.7$) and not what was predicted: adjusting speech and language to pupils with dyslexia when introducing a new study material (more straightforward sentences, explanation of concepts, highlighting the essence) ($\bar{x} = 2.2$). H4 for the new study material stage cannot be confirmed, as fewer teachers opted for adjusting speech and language to pupils with dyslexia when introducing the new study material (more straightforward sentences, explanation of concepts, highlighting the essence) ($\bar{x} = 2.2$).

The most common adaptation used by the history teachers in the practice stage was helping pupils with dyslexia with problems such as misunderstanding, difficulty remembering and difficulty following instructions with additional explanation ($\bar{x} = 2.8$). Additionally, the teachers often opted for these adaptations: carefully monitoring practice and observing the progress of each pupil with dyslexia ($\bar{x} = 2.7$) and helping them if they had difficulties expressing thoughts in written and oral form ($\bar{x} = 2.7$). H4 for the practice stage can be confirmed, as the predicted adaptation matches the history teachers’ responses. We found that the history teachers used all the above mentioned adaptations in the classroom, which indicates their knowledge and understanding of the problems of pupils with dyslexia and their needs in the learning process.

The adaptation most often used by the history teachers in the repetition stage was to ask repetition questions that related to the essence of the new study material ($\bar{x} = 2.2$). Given the predicted adaptation, H4 can be confirmed. We correctly
assumed that history teachers often asked pupils with dyslexia repetition questions about the essence of the new study material. Slightly less often they organised different ways of repetition requiring knowledge at different levels ($\bar{x} = 2.0$).

The most common adaptation in the evaluation and assessment stage was using continuous evaluation and assessment for pupils with dyslexia ($\bar{x} = 2.2$), which means that H4 can be confirmed. By regularly evaluating knowledge, history teachers have greater control and easier traceability over the acquired knowledge and understanding for the pupils with dyslexia. Given that history as a subject often requires an understanding of a more considerable amount of teaching material, the summative – final examination of knowledge is less appropriate for pupils with dyslexia, as shown by the survey responses by the history teachers ($\bar{x} = 2.1$).

5.5. **What teaching methods do history teachers most often use for pupils with dyslexia in history lessons?**

The responses showed that most history teachers who were surveyed (78%) used and adjusted the method of explanation. The second most common teaching method was discussion, chosen by 67% of the teachers, followed by the method of visual presentation (61% of the teachers) and the method of working with visual sources (61% of the teachers).

We found that the history teachers most often used four methods: the method of explanation, discussion, the method of visual presentation and the method of working with visual sources, which they also adapted most frequently to pupils with dyslexia in primary schools. The explanation and discussion methods allow pupils to explain a specific topic directly and verbally. In the latter method, pupils can comment, ask questions and instantly solve the problems that make it difficult for them to follow and understand the material. Using visual presentation and visual sources enable pupils with dyslexia to visualise and conceive a particular topic visually, thus facilitating their understanding and stimulating their thinking through their strengths.

H5 cannot be fully confirmed, as the teachers’ answers showed that not all of the reported methods matched the predicted ones; save for the method of visual presentation and using visual sources. The teachers most often used the methods of explanation and discussion to adapt history lessons to pupils with dyslexia, using much less the methods we predicted, namely the method of experiential learning (role play) and the method of working with moving images (video). We assume that these two methods are also used less in primary school in general.
6. Conclusion

Dyslexia can be defined as a specific disorder that causes pupils to have difficulties in reading, writing, spelling, processing information and, consequently, understanding a specific topic or text. The problems of pupils with dyslexia frequently occur in history lessons as well. Pupils with dyslexia need to have their lessons adapted both organisationally and methodologically, which was confirmed by the answers of the history teachers in a short empirical study.

Based on the relevant literature, we found that for pupils with dyslexia, teaching adaptations of history lessons are essential in several areas. The effective functioning of a pupil with dyslexia in the classroom requires adaptations to each stage of the lesson. Thus, the history teacher has to judge the use of specific tasks appropriately. The following types of tasks are more suitable: tasks with visual materials, auditory tasks, tasks with moving images, experiential learning and didactic games. History teachers can also help the pupils by displaying the right attitude towards them, accepting their mistakes and displaying elevated social sensitivity.

The findings of the empirical research study cannot be generalised to all history teachers in Slovenia. However, in a small sample, the history teachers in primary schools in north-eastern Slovenia recognised a variety of problems of pupils with dyslexia in history lessons. The main issues of pupils with dyslexia appeared in the ability to collect and select essential information and evidence from various historical sources and literature (pictures, maps, written sources, etc.), in the ability to understand the causes, processes and consequences of specific historical events from various historical sources and literature and by employing the skills of spatial visualisation. For pupils with dyslexia, the most common problems were seen in learning content or themes from the history curriculum such as „The beginning of science, art and belief“ (6th grade), „The cultural image of non-European peoples“ (7th grade), „A new view of the world and the human“ (8th grade), „Political characteristics of the 20th century“ and „Slovenes in the 20th and 21st centuries“ (9th grade). These topics include a more demanding political and cultural content. The responses show that the history teachers most often adapted history lessons to pupils with dyslexia with didactic aids and by adapting individual stages of the lesson. These adaptations were most evident in the stage of the introduction of a new study material, in which the teachers tried to present the new subject matter more clearly and systematically. Significant adaptations were also noticeable in the practice stage, where the teachers most often helped pupils with dyslexia with problems such as misunderstanding, difficulty in reading and difficulty in following instructions. In the repetition stage, they tended to pose repetition questions that related to the essence of the new study material. In contrast, the evaluation and assessment stage were mainly executed in the form of continuous tests and grading. In the context of methodological adaptations, the history teachers highlighted the use of explanation, conversation, visual presentation and using visual sources.
It is important for primary school history teachers to be well trained in teaching and guiding pupils with dyslexia. They should also regularly cooperate with educational specialists. That way, they make it easier for pupils to understand their history lessons and deal with potential shortcomings and problems more efficiently. Teachers should also be aware of all the strengths that pupils with dyslexia might have (e.g., the ability to think visually, the visual-spatial ability, etc.) and use them to their advantage when adapting the learning process.

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ŠPELA BEZJAK: IDENTIFYING LEARNING DIFFicultIES AND ADAPTING HISTORY LESSONS


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Prepoznavanje poteškoća u učenju i prilagodba satova povijesti učenicima s disleksijom u osnovnim školama

Učenici s disleksijom pripadaju skupini djece s poteškoćama u učenju, čiji se problemi vide kao poremećaji čitanja i pisanja. Zbog poteškoća učenika s disleksijom u čitanju, pisanju i obradi informacija, problemi učenika s disleksijom vidljivi su i na satovima povijesti u osnovnim školama. Empirijskim istraživanjem, odnosno anketiranjem učitelja povijesti, utvrdili smo da učitelji povijesti u sjeverozapadnoj Sloveniji prepoznaju neke poteškoće s kojima se susreću učenici s disleksijom pri postizanju minimalnih standarda postavljenih kurikulumom povijesti. Učitelji, uzimajući u obzir poteškoće učenika pokušavaju pomoći didaktičko-metodičkim prilagodbama (osobito pri obradi, vrednovanju i ocjenjivanju znanja). Međutim, predlažemo da učitelji povijesti stalno usavršavaju svoje profesionalne vještine, jer jedino tako mogu adekvatno prilagoditi nastavu povijesti učenicima s disleksijom.

Ključne riječi: osnovna škola, satovi povijesti, poteškoće u učenju, učenici s disleksijom, prilagodbe satova, diferencirani satovi