Textbook: Focus on Students' National Identity

The problem of developing textbook requirements for primary inclusive education

Olga E. Gribova (a), Julia A. Shulekina (b*)

(a) Institute of Special Education of the Russian Academy of Education, 119121, Moscow (Russia), bldg. 1, 8, Pogodinskaya Street
(b) Moscow City University, 129226, Moscow (Russia), 4, Vtoroy Selskohoziajstvenny proezd, Juliah@mgpu.ru

Abstract

This article discusses problems with the functioning of textbooks in modern inclusive education. A textbook is understood as a learning tool, the most important component of learning of a modern schoolchild. Irrespective of the type of educational organization and the form of education, the textbook should solve educational tasks connected with knowledge acquisition and the formation of basic educational competencies. Nowadays, the question of the requirement for textbooks to be accessible to different categories of students is raised. It is emphasised that the development of the 'right' textbook is one of the factors that determines the success and effectiveness of students throughout the learning process. The authors relate textbook requirements for inclusive education with the basic learning process, which is text comprehension. Based on the description of the specifics of students with speech impairment, we have modeled ways to optimize an existing Russian language textbook and adapt it to the comprehension abilities of this category of students. The research is presented as a review of fundamental resources that address various aspects of the development of textbook requirements. It is based on a psychological and pedagogical approach, which focuses on the special educational needs of students with disabilities as a reference point for modernization of existing textbooks, because the textbooks which were developed for normally developing students are ineffective in teaching children with disabilities. The article presents the difficulties which students with speech impairments may encounter at the initial stages of work with a textbook and proposes ways of solving potential problems. The results of the study are practically significant for updating the methodological support of primary education in the Russian Federation.
Keywords: textbook, understanding texts, text competence, students with disorders.

Introduction

A textbook is one of the leading learning tools in a modern school. A textbook helps pupils to master the curriculum in the basic subjects (mathematics, Russian language, reading comprehension).

The development of textbooks for primary and secondary school audiences is a multifaceted problem. On the one hand, a textbook should reflect the content of academic disciplines and thus act as a source of knowledge, and on the other hand, act as a learning tool for students to learn how to learn.

Thus, a primary school textbook is characterised by a number of parameters that make it both effective and attractive to the learners in terms of content and design (Order 2019 No. 695).

One of the basic requirements for the content of a textbook is the need to present the textbook materials in a way that takes into account the age and psycho-physiological development of the students. This implies that the textbook content must be accessible and, most importantly, understandable to the different categories of students attending a school. This makes the issues stated in this article relevant for both normally developing students and students with disabilities (Sanina & Enzhevskaya, 2016). This point is particularly important when teaching children with disabilities in the context of inclusive and differentiated education.

Purpose and objectives of the study

Aim: Based on the identification of the specifics of text comprehension of learners with speech impairments, develop requirements for a Russian language textbook that can be used in inclusive education.

Objectives:

1. To study the specifics of text comprehension by students with special educational needs through the assessment of students with general underdevelopment of speech. (hereinafter referred to as ODR).

2 Identify requirements for educational texts adequate for the special educational needs of this population of learners.

Literature review

The discussion of issues related to the comprehension of literary/educational texts cannot be complete without analysing the broader context. This context is associated with textual competence, by which the authors understand the conglomerate of linguistic, speech and communicative means, norms and mechanisms of their recoding that are formed during ontogenesis (Gribova, 2017). Thus, the effectiveness of work with textbooks depends on a students linguistic competence,, speaking skills, and the development of their corresponding cognitive mechanisms.

Text comprehension processes are not formed in isolation. They are an integral component of textual

competence, which is understood in modern educational standards as an indicator of an uptake of the abilities and skills of working with texts of different formats and modalities.

An analysis of literature shows problems of text comprehension inherent to learners with learning difficulties (Narkon & Jenny, 2013; Kendeou et al., 2014; Kaldenberg et al., 2015; Botsas, 2017) as well as to categories of learners with different types of disabilities. These include children with hearing impairments (Kirdyasheva, 2018; Asylbaeva, 2019; Ilyushina, 2019), intellectual disabilities (Vasilevskaya, 2006), mental retardation (Dmitrieva & Brukhovskikh, 2016), speech impairments (Haebig et al, 2015; Gribova, 2020) and autism spectrum disorders (Lucas & Norbury, 2014; Haebig et al, 2015; Paynter et al, 2016; McIntyre, 2020; Davidson et al, 2018).

These studies have identified similar comprehension problems for learners when studying both literary and academic texts: incomplete understanding of content, difficulties in making logical connections in relatively large texts, insufficient level of understanding of lexical and grammatical content of the text, etc. There may, however, be different causes for similar problems depending on the learner.

The problem of text comprehension has been studied particularly thoroughly in children with special needs, as this group of students is the most numerous (according to some data, up to 25% of students at school).

General underdevelopment of speech, according to the psychological and pedagogical concept of analysis of speech disorders, is a specific form of speech pathology manifested as primary underdevelopment of all aspects of speech - sound and meaning (Levina, 2005; Logopedia, 2017; Filicheva & Chirkina, 2005).

The causes and severity of speech disorders vary. What unites this group of children are the peculiarities of the linguistic manifestation of the defect (defects in the formation of language, speech and communicative activity of children), the absence of primary deviations in the development of intellectual abilities, as well as the absence of gross deviations in the development of sensory systems.

The general consensus is that the lack of text processing is one of the impediments to learning for these children, since text, presented in written form (textbook text) or presented orally (via the teacher's explanation), is the main means of learning.

The following weaknesses, which are common to this group of children, are identified as the main problems of textual processing

- inability to identify the text as a linguistic unit;

- inability to understand factual information, both implicitly and explicitly

- inability to construct a "mental model of the text" or "background";

- the presence of side associations that are activated in the course of text processing and impede the understanding of the information contained in it.

The above-mentioned difficulties manifest in children at the level of oral speech when listening and in

written speech when reading (Vorobyova V.K., 2006; Gribova O.E., 2017; Shulekina Y.A., 2020; Bishop, 2009).

Recent research suggests that the textual competence of students with ODR has a qualitative peculiarity and remains underdeveloped (compared to students without speech disorders) throughout the whole period of schooling (Gribova, 2020).

Although comprehension is widely interpreted, there is a lack of systematic research on how to structure and set requirements for instructional texts in order to make it easier for these children to use the textbook. There are exceptional attempts to find optimal fonts for dyslexic children without changing the content of the text, but this practice seems to be very narrowly focused. Appropriate textbook requirements can only be developed if there is an understanding of the difficulties that learners have in working with textbook texts.

Methodology

The present review has been prepared with the use of textual and internet resources. The corpus is comprised of works which align with the authors' views, including the early works of the authors of this article on the stated issue. The literature used in the review reflects current trends in inclusive education, ensuring the validity and relevance of the material.

Results

Based on the synthesis of materials from our earlier publications (Gribova, 2017, 2020), we were able to draw a complete picture of the nature of text comprehension of children with speech impairments at different stages of schooling.

The analysis of the nature of text comprehension of factual information by primary school students with speech impairments has revealed that in the initial stages of learning, the children's main attention is focused on the verbal shell of the text, which is vital for them. The analysis of information is not done independently and is possible only under the guidance of an adult. Pupils' counteractivity is low. Children try to memorize the text in as much detail as possible without extracting facts and without creating background information. However, whether through their language ability, albeit underdeveloped, or their familiarity with the primary school curriculum, by the start of primary school they have a fairly confident grasp of the three parts of a text", which then makes it easier for them to understand texts as the beginning and the end are strongest positions. Correlation of the obtained data with the data on the formation of textual competence and textual activity in ontogenesis indicates that at this stage the level of textual competence in general corresponds to the age of 6-7 years. However, the absence of active text processing

does not allow pupils with general underdevelopment of speech, unlike children with normal development, to build a model world of text. At the same time the positive dynamics of textual competence formation is insignificant.

To design textbooks it is important to understand the trends that are typical for the development of text comprehension of the given cohort of students in later stages of education, which allows taking into account the zone of proximal development.

Our research allowed us to build a model of textual competence development for children with speech impairments in terms of text comprehension. In primary school in the 5th-6th grades when the volume of texts increases, pupils try to distinguish its key elements, which are the subject and the actions performed by it. Initially, this strategy proves to be an effective way to understand information in narratives with a linear structure, since the highlighted elements build up the main plot.

However, the highlighted key units are referential rather than denotative, as the strategy of associating textual referents with objects of one's own experience is used. This results in a lack of correlation between information the child has introduced and the information in the primary text. The associations are so powerful that they can completely capture a child's attention, so that they ignore the content of the primary text. Thus, in the early stages of school, while there is a positive trend in the formation of the mechanism of keyword selection, two strategies are causing issues: the strategy of word-by-word reproduction and the strategy of association with referents outside of the primary text, with associations being, as a rule, affective in nature.

It is noteworthy that the mechanism of keyword extraction and the mechanism of association are formed in parallel, and the basis for the extraction of key points is not the denotative structure of the text, but the subject-predicate one. This leads to an understanding of the subject of the narrative and a lack of understanding of the relationships between the objects in the descriptive text, since the integrity of the text at this level is determined by the common subject in the child's mind. The text processing occurs sequentially from sentence to sentence or from a key phrase to the next highlighted key phrase. Difficulties in retaining verbal material in memory result in numerous omissions of information and disruption of narrative sequence. There is no incorporation of information when comprehension difficulties occur, so children at this level of textual competence development cannot assess the quality of their text comprehension.

The picture at this stage corresponds, on the one hand, to the 3rd-4th grade level, since it is possible to isolate the referential plan, on the other hand, to the 1st grade level, since associative connections are still quite strong.

Further development and refinement of the keyword mechanism in grades 7 and further makes it possible to identify the introduction and conclusion of key positions of the text, which already ensures thematic

unity of the text's content in the child's mind. The association mechanism is also transformed. These are no longer secondary associations, but focused associations, which are related to the child's attempts to relate their own knowledge to the facts that they extract from the text. There is a transition to an active construction of the projection of the text. The adolescent's reciprocal activity, aimed at interpreting the content-factual information of the text increases. However, at this level of understanding, the opportunity to penetrate the model world of the author is limited. The mechanism of inferring is not yet formed, so the pupil builds the projection of the text according to his/her encyclopedic knowledge and experience. In addition, the strategy of word-by-word memorisation of the text is still quite active. This leads to only partial understanding of facts of the text, for a variety of reasons: insufficient short-term memory, difficulties in selecting keywords; problems of inhibiting side associations, and unformed mechanisms of anticipation and retrieval.

A significant role in the further development of textual competence is played by the formation of mechanisms providing for the analysis of the theme-rheme structure of the text, which determines the possibility of forming the text coherence in the child's consciousness. The more the theme-rheme structure of the text differs from linear incorporation, the more difficult it is for adolescents to discover the connections between individual parts in the text. Therefore, the communicative structure in narrative texts makes it difficult for students at this level of textual competence to understand them.

The lack of understanding of the text's facts is partially compensated by a triggering predicting mechanism, which is activated when there are gaps in understanding. In this way the contradiction between the need to construct a coherent background and the inability to create one is resolved. The existence of this probabilistic prediction mechanism implies that when analyzing the content of the text, processes of self-reflection occur. The student considers how adequately they have understood the author's intended message. In secondary texts where there are comments and clarifications on the information in the primary text, pupils try to understand not only the dry facts they have extracted from the text, but also to discover the position of the author; his or her attitude towards these facts. This in turn, stimulates increased reflection on the figurative means of the text. A number of features are typical of the level of development of textual competence of 5th-6th grade students with normal speech development, but the volume of understood facts lags far behind the norm.

Further development of textual competence is provided by the development of the above mentioned mechanisms as well as by inhibiting side associations. Working with the information of the whole array of texts is conducive to forming predicting skills, which to a certain extent compensates for the insufficient level of development of lexical and grammatical skills. It is at this level that the development and formation of sub-skills begins, including not only independent analysis of the content-factual information of the text, but also semantic analysis.

Thus, the formation of textual competence is a long and multi-stage process during which non-productive strategies are inhibited and productive ones are formed, permitting not only comprehension of facts, but also deeper levels of meaning.

The analysis of the data obtained in the course of the study revealed that while there are positive dynamics, most secondary school graduates with PSD never reach an acceptable level of textual factual analysis. This implies a need to revise teaching methods, mainly in primary school. Teaching methods for secondary school also have room for significant improvement. In addition to teaching methods, the requirements for textbooks need to be revised.

The current data allowed us to identify ways of optimising the textbook based on the ability of students with speech impairments to understand the textbook as a collection of different texts (linguistic, visual, mixed).

It is suggested that the design and content requirements of a textbook for an inclusive school should meet the following parameters:

- The textbook takes into account different modalities of perception of the information it contains:

  - The textbook is illustrated with beautiful, bright pictures in a realistic manner. The proportions and scale of the images are harmonious and the colours are clear and accessible;
  - The layout of the textbook is without spatial distortions and follow the laws of visual harmony;The textbook uses visual, graphic, modular material which, firstly, fulfils the function of independent information carrier and/ or contains elements that add additional nuances to the content of the teaching material; secondly, it duplicates the key points;The textbook comes with audio and video versions on an electronic medium;

- The textbook has intra- and inter-textual differentiations that optimise the child's autonomous, one-to-one work with the textbook. These include:
  - Extended colour differentiation;

  - Typographic differentiation;

  - Compositional marking;

  - Navigational supports to help move easily from one task to another, from one topic to another;

  - Integrated, intuitive pattern to tasks;

○ Page-by-page conceptual zoning

● The textbook contains clear and regular rubrics (e.g. vocabulary or rule or self-test).

● The textbook has a harmonious mix of microtexts:

  ○ The textbook is structured on the principle of moving from polycode microtexts for elementary level reading (isotexts, comics) to predominantly monocode micro and macrotexts for independent, meaningful fluent reading;

  ○ The organisation of the material on the first pages of the textbook promotes viewing (non-linguistic material prevails over linguistic material) rather than reading;

  ○ The textbook makes a clear distinction between instructions, didactic tasks and texts for work.

● The textbook reflects the systemicity of language (sound - word - phrase - sentence - text) both in the distribution of the main sections of the textbook and in the wording of the tasks. The linguistic complexity of the textbook's microtexts is subordinated to this principle:

  ○ The instructions at the initial stage of study are one-step, represented by one-word constructions or pictograms;

  ○ Linguistic texts with predominantly factual information (descriptive and narrative);

  ○ The textbook has supplements to automate reading skills in the main sections.

Table 1. proposes a scheme for adapting a modern Russian language textbook for primary schools to students of different educational abilities in inclusive classes (Shulekina, 2018). This scheme shows what difficulties first graders with PSD may encounter in the initial stages of working with the textbook, and suggests ways of solving potential problems. In tackling these problems, we have taken into account that text comprehension difficulties can manifest in a systemic way, together with general comprehension difficulties.

Table 1.
Scheme for adapting the Russian language textbook to the educational abilities of students with special

needs (primary school)

Difficulty groups	Text book problem	Solution
I Group of difficulties	Lack of unified requirements for the formatting of iconic information in educational texts	The introduction of universal ideographic icons for different textbooks.
	Ineffective differentiation of learning material	Intra-text and inter-text differentiation optimises the child's independent, one-to-one work with the textbook: - there is extensive colour differentiation in the textbook; - There is a font differentiation in the textbook; - there is compositional differentiation in the textbook. The means of differentiation contribute to the intuitive perception of learning information, their saturation is limited.
	Haphazard arrangement of sample learning activities in the text	In the textbook, the pattern is integrated into the task, the reliance on it is intuitive.
	Difficult to navigate around the textbook page or the textbook as a whole	The textbook has navigational supports to help you move easily from one task to the next, from one topic to the next. The textbook has page-by-page conceptual zoning. The textbook contains a clear, clear and regular rubric (e.g. a vocabulary or rule or self-test) to help you navigate easily through the sections of the material.
II Groups of difficulties	Non-observance of the ontogenetic principle in the linguistic design of textbook microtexts	The linguistic design of the textbook's microtexts is based on the principle "from simple to complex" (e.g. one- and two-word instructions for the tasks prevail at the beginning of the textbook, with their grammatical models becoming more complex later on).
	The presence of complex syntactic constructions - "not for autonomous reading"	Instructions at the initial stage of learning are single-step, represented by one-word constructions or pictograms. Language texts with predominantly factual information (descriptive and narrative).
	The presence of terms in	Restriction of terminological vocabulary in instructions

	instructions and didactic tasks	and didactic tasks in the initial stages of training.
	Existence of obscure language	The wording of the tasks is very simple and concise. The instructions are fractional and step-by-step. The task instructions contain no more than one or two actions, and the grammatical form of the construction itself meets the "marker at the beginning, target at the end" requirement (the key word-object is placed at the beginning of the construction, followed by the words revealing the purpose of the message).
	Violation of stylistic norms	The textbook clearly distinguishes between instructions, didactic tasks and texts for work.
III Group of difficulties	Lack of information in the textbook that is relevant to the students	Selection of texts, ideographics, visual design of learning material in line with current cultural and educational trends.
	Ignoring gender-specific perceptions	The textbook contains tasks that involve different strategies for problem solving - creative, formulaic and mixed. The illustrative material in the textbook is gender-sensitive.
	Uselessness in the daily life of the student	The inclusion of work with the textbook in the routine moments of the educational process (curricular and extracurricular).
	Violation of aesthetic standards for the presentation and design of educational materia	The textbook is illustrated with beautiful, vivid pictures in a realistic manner. The proportions and scale of the images are harmonious and the colours are clear and accessible.
	Organisation of information markers on textbook pages without taking into account the age specificities of children's perception	The textbook's graphics and frames are presented without spatial distortion and obey the laws of visual harmony. The textbook is structured according to the principle of moving from polycode microtexts for beginning reading (isotexts, comics) to predominantly monocode micro- and macrotexts for independent, meaningful fluent reading. The organisation of the material on the first pages of the textbook promotes viewing (non-linguistic material prevails over linguistic

		material) rather than reading.

Discussions

This paper shows that the development of textual competence in students with PSD takes place over a long period of time and in stages. During this process, productive comprehension strategies that allow comprehension not only of factual information but also of deeper meaning are gradually replacing nonproductive comprehension strategies. This is associated with students' progress in learning.

Nevertheless, students with DIBS differ significantly in the dynamics of textual competence acquisition from their peers without speech impairments. Confirming this point, G. Botsas emphasizes that the prior knowledge of children with learning difficulties (a group in which he includes students with speech impairments) is limited and unstructured, and the children themselves are not able to build a rich knowledge base that can be acquired in a fruitful and successful way. Whereas students without learning disabilities tend to have the necessary strategies and knowledge to solve emerging problems in text comprehension (Botsas, 2015).

The close connection between text comprehension processes and educational outcomes (in the form of effective textbook performance) has been pointed out by many international researchers. This raises the issue of predicting learning outcomes when students' comprehension skills are at different levels.

As stated, students in inclusive schools are a polymorphous group and different children use cognitive and metacognitive comprehension strategies differently when reading different kinds of texts (including textbook use). For students to achieve good learning outcomes, it is important that they receive and use the instruction they are given. This, in turn, necessitates teaching students strategies for accurately identifying important aspects of any text that they encounter in their learning experiences. Some students naturally have comprehension skills, while others need to practice in order to master this skill (Felts, 2018). It is crucial for teachers to teach children reading comprehension strategies so that the comprehension skill can be used in every subject/discipline and students can improve their reading achievement in daily lessons (Shea & Ceprano, 2017).

Thus, the current educational trend reflects two critical points: specific pre-service training is needed to support students' comprehension of texts (Kim Y.-S., 2015) and/or teaching specific skills directly in the classroom (Botsas, 2015; Felts, 2018; Baz & Baz, 2018). The more elements of the learning process such strategies are embedded in, the more effective the outcome. These can include teacher explanation, textbook content and design, and student group work.

The need to teach students with different educational abilities and needs to understand learning information poses serious challenges to educators, which are addressed by the syncretism of traditional pedagogical and

special (remedial) approaches. In this sense, the "correct" Russian language textbook can be seen as a tool for developing and correcting important comprehension skills, including this very function in the methodological toolkit of a school teacher.

This study also opens up the prospect of a continuum of learning about the ability of students with speech impairments to work with the textbook at later stages of school (primary school): by learning to work correctly with textbook texts, such students can apply these skills to their academic achievement (Ergen et al., 2019).

Conclusion

In the context of this study, it seems important to list the most significant findings.

1. The specific features of text comprehension by students with special needs have been identified that prevent successful acquisition of subject competencies.

2. The problems in the structure of learning texts that cause the most difficulties for this contingent of students are shown.

The requirements for multicode texts (in particular, for a textbook on Russian language for primary school), adequate to the special needs of students with DIBS, have been determined.

References

Asylbaeva, A. R. (2019) Developing comprehension of literary texts among hearing-impaired young pupils in reading classes. Special pedagogy and psychology: traditions and innovations. Proceedings of the All-Russian scientific conference of young scientists and students with international participation, 138-140.

Vasilevskaya, V. Y. (2006) Studying the understanding of artistic texts by mentally retarded children (to help diagnose mental retardation). Almanac of the Institute of Special Pedagogy, 10, 25-41.

Vorobyeva, V. K. (2006) Methods of developing coherent speech in children with systemic underdevelopment of speech. Moscow: AST Astril.

Gribova, O. E. (2017) Techniques of work on the formation of textual competence mechanisms in students with severe speech disorders. ASOU conference: collection of scientific papers and materials of scientific-practical conferences, 3. MOSCOW: ASOU. 216-224.

Gribova, O. E. (2020) Ways of exploring textual competence (the aspect of understanding content-factual information) in adolescents with speech impairments. Supporting Socialization of Children with Special Educational Needs: Theory and Practice. Collection of scientific works based on the results of All-Russian scientific-practical conference. IRKUTSK: IRKUTSK STATE PEDAGOGICAL UNIVERSITY. Irkutsk: publishing house of the Irkutsk State University. 117-126.

Dmitrieva, O. A. & Bryukhovskikh, L. A. (2016) Peculiarities of the formation of reading skills in children with mental retardation. Bulletin of Krasnoyarsk State Pedagogical University named after V.P. Astafyev, 4 (38), 129-134.

Ilyushina, S. V. (2018) What do hearing-impaired children learn if programmes and textbooks do not meet their special educational needs? Almanac of the Institute of Correctional Pedagogy, 2, 37, 70-82.

Kirdyasheva, A. V. (2018) Peculiarities of text comprehension by younger schoolchildren with hearing impairments. Scientific-methodical electronic journal "Concept", 9, 182-187.

Speech therapy. Theory and Practice (2017). M. : Eksmo.

Levina, R. E. (2005) To the construction of a pedagogical classification of anomalies of speech development. Speech and writing disorders in children: Selected works. MOSCOW: ARCTI. 37–38.

Order of the Ministry of Education of the Russian Federation No. 695 dated 18 December 2019 "On Approval of the Procedure for Forming the Federal List of Textbooks Allowed for Use in the Implementation of State-accredited Educational Programmes of Primary General, Basic General and Secondary General Education" https://www.garant.ru/products/ipo/prime/doc/73411419/

Sanina, S. P. & Enzhevskaya, M. V. (2016) Modern foreign studies of text comprehension by younger students. Electronic Journal of Contemporary Foreign Psychology, 5, 3, 83-91.

Filicheva, T.B. & Chirkina, G.V. (2005) Education and upbringing of children with general underdevelopment of speech. Speech therapy: a textbook for students of pedagogical higher education. M.: Humanities Publishing Center VLADOS, 614 - 647.

Shulekina, Y. A. (2018) Modern textbook technologies in inclusive education. Educational and methodological manual. MOSCOW: MOSCOW STATE PEDAGOGICAL UNIVERSITY. 100c.Baz, D. S. & Baz, B. A. (2018) Literature Review Study on Reading Comprehension. *Star. Journal of the Institute of Social Sciences, 2, 1,* 28-41.

Botsas, G. (2017) Differences in Strategy Use in the Reading Comprehension of Narrative and Science Texts Among Students With and Without Learning Disabilities. *Learning Disabilities: A Contemporary Journal, 15 (1)*, 139-162.

Davidson, M. M., Kaushanskaya, M. & Weismer S. E. (2018) Reading Comprehension in Children With and Without ASD: The Role of Word Reading, Oral Language, and Working Memory. *Journal of Autism and Developmental Disorders, 48,* 3524–3541.

Ergen, Y., Batmaz, O. et al. (2019) The Relationship between Level of Using Reading Comprehension Strategies and Reading Comprehension Achievement of Primary School Fourth Grade Students. *Journal Of The Faculty Of Education Of Mehmet Akif Ersoy University, 49*, 130-147. https://doi.org/10.21764/maeuefd.425949

Felts, T. (2018) Instructional Strategies for Improving Reading Comprehension. *COE 501 Introduction to Research and Evaluation in Education*. https://doi.org/10.13140/RG. 2. 2. 11538. 91846

Haebig, E., Kaushanskaya, M. & Weismer, S. E. (2015) Lexical processing in school-age children with autism spectrum disorder and children with specific language impairment: The role of semantics. *Journal of Autism and Developmental Disorders, 45 (12)*, 4109–4123. https://doi.org/10.1007/s10803-018-3617-7

Kaldenberg, E. R., Watt, S. J. & Therrien, W. J. (2015) Reading instruction in science for students with learning disabilities: A meta-analysis. *Learning Disability Quarterly, 38 (3)*, 160-173.

Kendeou, P., van den Broek, P., Helder, A. & Karlsson, J. (2014) A cognitive view of reading comprehension: Implications for reading difficulties. *Learning Disabilities Research and Practice, 29 (1),* 10-16. https://doi.org/10.1111/Idrp.12025

Kim, Y.-S. (2015) Language and Cognitive Predictors of Text Comprehension: Evidence From Multivariate Analysis. *Child Development, 86, 1*, 128–144. https://doi.org/10.1111/cdev.12293

Lucas, R. & Norbury, C. F. (2014) Levels of text comprehension in children with Autism spectrum Disorders (ASD): the influence of language phenotype. *Journal of Autism and Developmental Disorders, 44 (11)*, 2756-2768. http://dx.doi.org/10.1007/s10803-014-2133-7

McIntyre, N. S. (2020) Reading Comprehension Impairments in School-Aged Children with HFA. *Volkmar F. (eds) Encyclopedia of Autism Spectrum Disorders*. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-6435-8_102378-1

Narkon, D. E. & Jenny C. W. (2013) Improving Reading Comprehension for Elementary Students With Learning Disabilities: UDL Enhanced Story Mapping. *Preventing School Failure: Alternative Education for Children and Youth, 57, 4,* 231-239. https://doi.org/10.108.0/ 1045988X.2012.726286

Paynter, J., Westerveld, M. F. & Trembath, D. (2016) Reading Assessment in Children with Autism Spectrum Disorder. *Journal of Psychologists and Counsellors in Schools, 1 (2)*, 205-217. https://doi.org/10.1017/jgc.2016.15

Shea, M. & Ceprano, M. (2017) Reading with Understanding: A Global Expectation. *Journal of Inquiry & Action in Education, 9 (1)*, 48-68.