

Co-funded by the
Erasmus+ Programme
of the European Union



FORDYSVAR:

Book on specific learning difficulties in reading



fordys

V A R

Fostering Inclusive Learning
for Children with Dyslexia



UNIVERSIDAD
DE BURGOS

**FORDYSVAR: BOOK ON SPECIFIC
LEARNING DIFFICULTIES IN READING**



fordys
V A R

Fostering Inclusive Learning for Children with Dyslexia

FORDYSVAR: BOOK ON SPECIFIC LEARNING DIFFICULTIES IN READING



**UNIVERSIDAD
DE BURGOS**

2022



Co-funded by the
Erasmus+ Programme
of the European Union

This work has been co-financed by the Erasmus+ program of the European Union through the 2018-1-ES01-KA201-050659 project. That of the European Commission for the preparation of this publication does not imply acceptance of its contents, which is the sole responsibility of the authors. Therefore, the Commission is not responsible for the use that may be made of the information disclosed here.

ERASMUS + KA2. Strategic Associations School Education
2018-1-ES01-KA201-050659



SCIENTIFIC EDITORS

UNIVERSITY OF BURGOS

Raquel Casado Muñoz
Gemma Santa Olalla-Mariscal
María Begoña Medina-Gómez
Lorena Montesano
Lucía Muñoz Martín
Laura Lozano Arnáiz

IRCCS EUGENIO MEDEA

M^a Luisa Lorusso
Andrea Martinuzzi

ASOCIATIA BUCURESTI PENTRU COPII DISLEXICI

Angela Ioan

K-VELOCE

Belén Costa Ruiz

Esta obra está bajo una licencia de Creative Commons. [Atribución-NoComercial-SinDerivadas 4.0 Internacional](https://creativecommons.org/licenses/by-nc-nd/4.0/)



© LOS AUTORES

© UNIVERSIDAD DE BURGOS

Edita: Servicio de Publicaciones e Imagen Institucional
UNIVERSIDAD DE BURGOS
Edificio de Administración y Servicios
C/ Don Juan de Austria, 1
09001 BURGOS - ESPAÑA

ISBN: 978-84-18465-19-2

DOI: <https://doi.org/10.36443/9788418465192>

TABLE OF CONTENTS

1. INTRODUCTION	11
2. FROM THE CONCEPT OF DYSLEXIA TO THE CONCEPT OF SPECIFIC LEARNING DIFFICULTIES IN READING	15
3. STUDENTS WITH SPECIFIC DIFFICULTIES IN LEARNING TO READ	21
3.1. Specific learning disability in basic reading processes or dyslexia....	21
3.2. Specific learning disability in complex reading processes	26
4. EDUCATIONAL POLICY IN ATTENTION TO DIVERSITY	31
4.1 Specific learning disability international education policy: UNESCO and Agenda 2030.....	31
4.2 Specific learning disability in the education policy of the European Union	35
4.3 Specific learning disability in the educational policy of the participating countries	38
4.3.1. In Spain	38
4.3.2. In Italy	59
4.3.3. In Romania	66
4.3.3. In Portugal.....	68
5. IDENTIFICATION AND ATTENTION TO DIFFICULTIES IN READING	71
5.1 From the discrepancy-based model to the intervention-based model	71
5.2 Models and professionals responsible for their identification and care in the participating countries.....	74
5.1.1 In Spain	74
5.1.2. In Italy	79
5.1.3. In Romania	83
5.1.4. In Portugal.....	84

6. PRIMARY INTERVENTION. EDUCATIONAL ATTENTION TO STUDENTS WITH DEA IN READING FROM THE CURRICULUM.....	85
6.1. The Five Skills That Predict Reading Success.....	85
6.2. Educational attention that is received from the curriculum in each country.....	95
6.2.1. The curriculum in Spain	96
6.2.2. The curriculum in Italy	108
6.2.3. The curriculum in Romania.....	110
6.2.4. The curriculum in Portugal	114
7. SECONDARY AND TERTIARY INTERVENTION OF DEA IN READING....	115
7.1. SECONDARY AND TERTIARY EDUCATIONAL CARE IN SPAIN.....	116
7.2. Universal Learning Design: inclusive care and personalized attention	118
7.3 Family of students with Specific learning difficulties in reading and School	125
7.4. Need for teacher training: initial and ongoing.....	128
8. REGARDING THE KNOWLEDGE THAT PRACTICING TEACHERS HAVE ABOUT SPECIFIC LEARNING DIFFICULTIES IN READING.....	131
9. TECHNOLOGICAL RESOURCES TO MEET THE EDUCATIONAL NEEDS OF PEOPLE WITH SPECIFIC READING LEARNING DIFFICULTIES	135
BIBLIOGRAPHIC REFERENCES	139

INDEX FIGURES

Figure 1. The process of reading	12
Figure 2. Classification of reader profiles.	18
Figure 3. Main rules that regulate the care of students with educational support needs in Spain.	40
Figure 4. Percentage of students by type of special educational needs in Spain in the 2018-2019 academic year.....	42
Figure 5. Rate of students in other categories with specific educational support needs	44
Figure 6. Students with NEAE according to type of education in the year 2018-2019.....	45
Figure 7. Students with specific need for educational support in basic education	46
Figure 8. Percentage of students included in Other categories of needs	46
Figure 9. Number of students with SESN from the academic year 2011-2012 to 2018-2019.	47
Figure 10. Evolution of the percentage of students with Specific Educational Support Needs from 12/11 to 19/18.	48
Figure 11. Evolution of the number of students from other categories who have received support from SESN from the 2011-2012 to 2016-2017 academic year in Spain.....	49
Figure 12. Geographic distribution of dyslexia associations in Spain.....	50
Figure 13. Percentage of students according to the type of need for educational support in Castilla - León in the 2018-2019 academic year.	52
Figure 14. Students with other categories of specific need for educational support in Castilla - León in the 2018-2019 academic year.....	53
Figure 15. Rate of students with language and communication disorders at different educational levels.....	53
Figure 16. Evolution of students with SESN enrolled in Castilla - León according to the 2011/12 to 2016/17 academic year.	54

Figure 17. Number of students from other categories that have received support from SESN from the 2011-2012 to 2016-2017 academic year in Castilla - León....	55
Figure 18. Pupils with SpLD and total pupils per school order.....	63
Figure 19. Types of Specific Learning Disabilities by school order	64
Figure 20. Increase of students with a diagnosed SpLD of the 2010/2011 school year to 3.6% of the 2018/2019 school year	65
Figure 21. Pupils with a diagnosed SpLD of the 2013/2014 school year to of the 2018/2019 school year	65
Figure 22. Model of response to intervention: 3 phases.....	73
Figure 23. Schematic diagram of the phases provided for by Law n. 170/2010 for diagnosis and certification of SpLD	81
Figure 24. Guidelines to promote motivation, access to information and participation in students with SpLD in Reading	125

1. INTRODUCTION

Reading competence refers to the ability of individuals to understand, use, reflect on and commit to written texts in order to achieve their own objectives, develop personal knowledge and potential, and participate in society (OECD, 2015, p.9). It is, therefore, a very powerful tool for the development of a culture and for all its members.

The purpose of the readings that students do in the classroom can be very diverse: to recreate themselves with the written text itself; to learn new knowledge; to be able to use the information contained in the text to carry out other tasks... Reading efficiently in this environment is a complex cognitive process because it requires the interrelation of a set of knowledge, with a series of general and specific processes, and with an attitude of achievement.

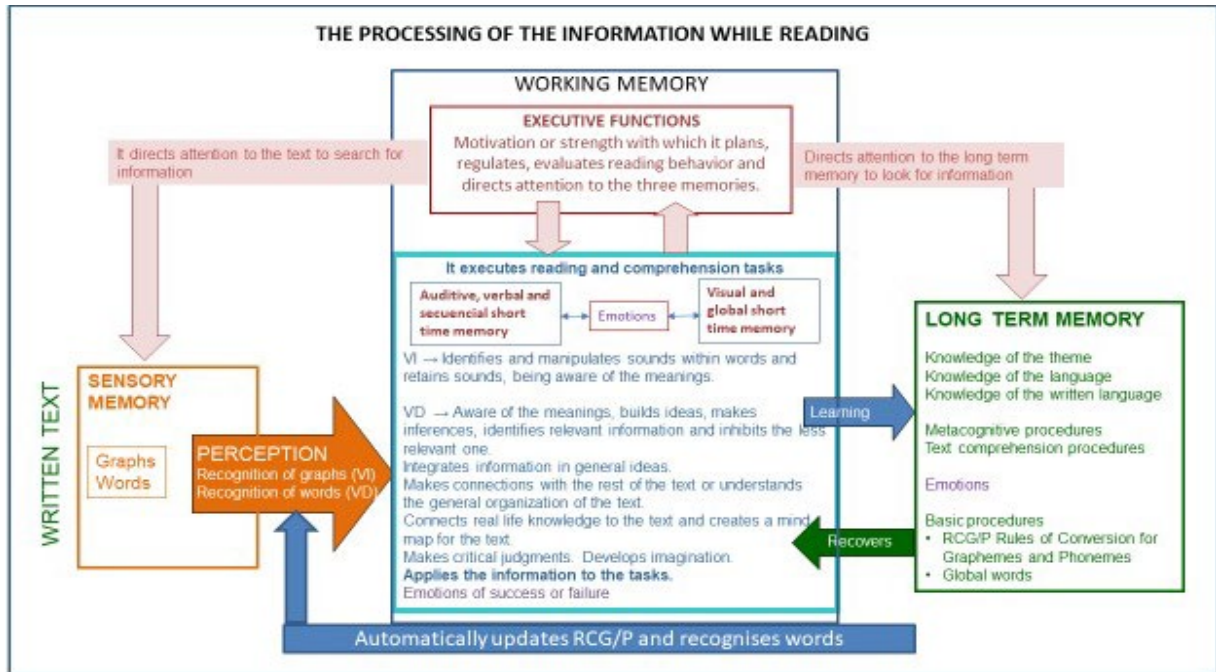
Thus, it is necessary to mobilize the reader's previous knowledge about the physical and social world of the subject matter, because it has to build cognitive bridges between the new information that is read and what is already known about the subject (González et al., 2010); Knowledge of oral language is needed because alphabetic writing systems are articulated on the phonological, lexical, grammatical and discursive dimensions of each language.

And, on this knowledge, a combination of procedures is applied. Some are general or metacognitive, such as having a reading goal, evaluating whether the proposed objectives are being achieved while carrying it out, and making decisions about whether to maintain or change the reading strategy when those objectives have not been achieved (Cain, 2010). Other procedures are specific to reading. Some are more basic, such as the application of the grapheme and phoneme correspondence rule (RCG / F) in a precise and fluid way (Nation, & Snowling, 2007) and others are more complex, such as the construction of ideas, the elaboration of inferences (Romero, & González, 2001), the integration of information (Kintsch, 1994) and the organization of the text in a coherent and cohesive whole (Meyer, 1984).

All of this is conditioned by the situational motivation of wanting to reach the deep meaning of the text and / or the purpose of putting this knowledge into

practice (Turner, & Paris, 1995). In figure 1 the processing of the reading is graphically synthesized.

Figure 1. The process of reading



Source: Own elaboration, based on information processing theory [Baddeley (2007) including in it, Morton's model of the double path (1969), Kintsch's text comprehension model (1998) and Johnson-Laird's text model (1963)].

These knowledge, procedures and attitudes are taught / learned in a formal and progressive way in school. Teachers strive to promote rich and creative activities in their classrooms that favor the curricular progress of their students. They want to awaken in them the need to read, to understand what they read and to use this information for different purposes (García, et al., 2013). Students also invest effort, time, and resources to achieve these learnings. Reading and writing skills that are applied to more complex and demanding activities as the educational level progresses.

Despite this involvement of teachers and students, not all students achieve an efficient reading level. The International Dyslexia Association (IDA) reports that between 5-15% of student's manifest permanent difficulties in executing the basic processes of word recognition, that is, they have dyslexia (IDA, 2014). And around 20-25% of all students at the end of Compulsory Education, find it difficult to

understand their school texts for linguistic, intellectual reasons or lack of mastery of basic and complex processes involved in reading (García et al., 2013).

Without adequate intervention, these students with low reading proficiency see their academic progress in school diminished, as well as their personal and social well-being (Kavale & Forness, 1996; Sabornie, 1994; Spear-Swerling & Sternberg, 1996), together with the decrease of their job opportunities (OECD / Statistics Canada, 2002).

It is, therefore, urgent and necessary: 1) to focus attention on the specific difficulties that many schoolchildren encounter in learning to read; 2) turn to scientific evidence to find out what actions should be taken so that no student is left behind for this reason; 3) propose reading and writing practices that help minimize the difficulties of these students and promote their strengths. In other words, it is urgent and necessary that all students can experience school success.

2. FROM THE CONCEPT OF DYSLEXIA TO THE CONCEPT OF SPECIFIC LEARNING DIFFICULTIES IN READING

The knowledge and strategies to be undertaken in effective reading are so diverse that difficulties in performing this task may arise at one or more levels of the process. For this reason, we cannot speak of dyslexia or SpLD (Specific Learning Difficulties) in reading, but rather people with dyslexia and / or people with SpLD in reading and / or literacy.

A simple but valid model that helps to understand a diversity of reading profiles is the Simple Reading Model or "Simple View of Reading" by Gough and Tunmer (1986) and Hoover and Gough (1990). According to this model, which is endorsed and nuanced by many other authors, two major components interact with each other during reading activity: decoding and general understanding of the language:

- The decoding component includes phonological skills, which provide reading precision (Hoover, & Gough, 1990) and reading fluency, which facilitates naming speed (Carballo, & Cuadro, 2007). Both skills allow access to the meaning of written words.
- The component of general understanding of the language contains, in addition to the lexical information that allows access to the representation of a sentence and / or speech (Hoover & Gough, 1990), morphological knowledge (Nunes, et al., 2006) and the vocabulary, syntax, inferences and the construction of mental schemes (Kirby & Gough, 1990).

These two components (decoding and general language comprehension) are related in a dynamic and evolutionary way with reading comprehension. In the first years of schooling there is a greater interaction between decoding and reading comprehension (Storch & Whitehurst, 2002); But, once the decoding has been automated, from the 4th year onwards, the most significant relationship begins to be established between oral comprehension and reading comprehension. This does not mean that the influence of decoding disappears, but that it decreases over time (Hoover & Gough, 1990).

Depending on how the person displays these two coding and listening skills, Bishop and Snowling (2004) identify 4 reading profiles: good readers, poor decoders (dyslexia), poor readers, and poor comprehensors:

1. Good set-top boxes and good understanding or "effective readers". They have fully automated skills that allow precise and fast recognition of words and, in addition, they have good oral comprehension. As they hardly use cognitive effort in decoding the spellings, they can use all their cognitive resources to understand the text at its different levels of organization.
2. The poor decoders and good comprehensors or "people with dyslexia". Their language skills can range from average to excellent; however, they show phonological processing difficulties. That is, they read with a lack of precision (they make serious or minor phonological errors) and / or they recognize words with little fluency (they invest a lot of time and effort). Although they can understand written text, they tend to spend more time and effort on this task than normal readers. According to Perfetti (1985), this is because the decoding process is so laborious for them that it saturates their cognitive system and makes it difficult for them to establish relationships between words and sentences, and sentences with each other, even to construct a mental representation of the text.

This profile is characteristic of people with dyslexia (Vellutino, Snowling, Fletcher & Scanlon, 2004). Although, in opaque languages, such as English and French, where the grapheme-phoneme relationship is more variable, the element that best predicts reading comprehension is precision (Chen & Vellutino, 1997); while, in transparent languages, such as Italian, Romanian or Spanish, where the grapheme-phoneme relationship is more consistent, the variable that best predicts reading comprehension is fluency (Florit, & Caín, 2011).

However, these people can minimize the effect of decoding difficulties and significantly improve their reading skills if they are provided with instruction to infer meaning from context, to identify textual structure, to operate with rhetorical cues, or by updating their linguistic competence (Cain, 2007; Cain & Oakhill, 2006; Nation & Snowling, 2007; Sánchez, et al., 2002).

3. The poor decoders and poor comprehensors or “people with a low reading level”. These people present difficulties in both axes: in the phonological component and, therefore, they are included in the category of dyslexias; and in the linguistic component, whose difficulties can vary from mild to severe. If the language difficulties are significant, they would have the dual diagnosis of Dyslexia and Developmental Language Disorders (Adlof, & Hogan, 2018).

In fact, within this reading profile there is a large group of people with Developmental Language Disorders who, on the one hand, have affected the phonological module and display a lower performance in decoding, whether it is reading in opaque languages (Bishop, & Adams, 1990; Catts, 1993; or transparent languages (Acosta, et al., 2016; Coloma, et al., 2012; Soriano-Ferrer, et al., 2019); and on the other hand, the lexical-semantic module is affected and the literal and inferential understanding of the text is compromised (Acosta, et al., 2016; Bishop, et al., 2009; Coloma, et al., 2012; Conti-Ramsden, et al., 2001; Nation & Snowling, 2007; Werfel, & Krimm, 2017).

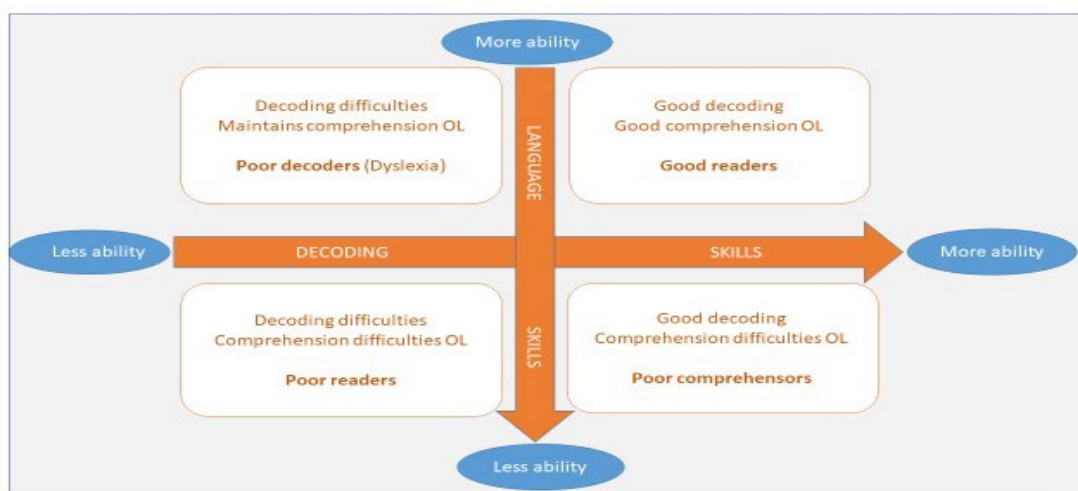
However, this data can be analyzed from the point of view of people with LDD who retain these skills. In this sense, Soriano-Ferrer et al. (2019) find that between 50% and 70% of children with Developmental Language Disorders have a normal performance in the different indicators of decoding skills (for example, accuracy, speed of reading words and pseudowords); and 13% display a normal performance in reading comprehension.

4. Good decoders, but poor understanding or “poor understanding people”. Students with this profile have good phonological skills, that is, they apply the RCG / F with precision and fluency and adequately recognize isolated words. Their difficulties are located at the lexical-semantic level of the oral language and this affects their reading comprehension. For Perfetti, et al. (2008), poor comprehensors could easily access the phonological or orthographic representation of the written word and, nevertheless, have difficulties in activating its semantics because, when this activation is not of quality, they find it difficult to recover the meaning of said word within

the sentence and / or the text itself. Within this reader profile people with a normal-low intellectual level can be found (Tramontana, et al., 1988); some people with Specific Disorders in Language Development who do not have an affected phonological module (Bishop, et al., 2009; Kelso, et al., 2007; Tramontana, et al., 1988) or other people with Autism Spectrum Disorder (Frith, & Snowling, 1983).

In figure 2, a synthesis of the four described reader profiles is offered.

Figure 2. Classification of reader profiles.



Source: Own elaboration from Bishop and Snowling (2004).

However, these two essential or necessary components that form the backbone of the Simple Model of Reading, Coding, and General Understanding of Language, are not enough to explain the diversity of students' reading difficulties.

There is a large group of students who, having preserved their intellectual capacity, good decoding skills and a normal level of oral language comprehension, an understand the general meaning of the text when the material is familiar, they find reading difficulties when the goal is to acquire new information (Sánchez, 1988).

It is this type of reading profile that some authors actually call poor comprehensors (Catts, et al., 2006) and that García et al. (2013) identify as people with specific reading comprehension difficulties or with SpLD in reading comprehension. This specific problem would affect around 5-10% of students.

These data are found, both in studies carried out in Anglo-Saxon countries (Nation, & Snowling, 2007), as in Italy (Cornoldi, & Oakhill, 1996) and as in Spain (García et al., 2013), and their difficulties are explained through the following cognitive variables:

- Due to poor control of cognitive and metacognitive processes. That is, they encounter difficulties in the processes of integration of meanings, monitoring and working memory (Berkley, 2012; Cain, et al., 2004; Cornoldi, et al., 1996; Nation, & Snowling, 2007); or in the ability to decide when to make an inference and use the context (Balbi, et al., 2009).
- Due to limitations in working memory, not only because the decoding processes occupy space (Gathercole & Baddeley, 1993; Ribaupierre & Hitch, 1994); rather, because the cognitive resources they mobilize to understand the text saturate their working memory (Stein & Glenn, 1982).
- For displaying little knowledge about the subject being read; that sometimes includes a lack of vocabulary and other times, due to a lack of knowledge on the subject matter (Afflerbach, 1990).

However, these specific comprehension difficulties do not have to be permanent (Cornoldi, & Oakhill, 1996). These deficits can be alleviated by teaching students explicitly cognitive and metacognitive processes; strategies for making inferences; strategies to minimize the effect of difficulties in working memory (TM); and / or contributing previous knowledge on the subject that is approached in the text. Furthermore, Cain (2007) finds that different reading groups benefit from contextual strategies to infer the meaning of new words, just by trying, regardless of intervention programs.

In summary:

Given the diversity of reader profiles and their difficulties:

- Decoding difficulties.
- Oral language comprehension difficulties.
- Difficulties in carrying out high-level cognitive processes applied to the comprehension of texts.

The concept of dyslexia should be extended to the concept of SpLD in reading. Because, it is necessary to foresee specific educational responses of different educational support, depending on the reading profile and / or specific difficulties that the reader encounters when carrying out the reading task.

3. STUDENTS WITH SPECIFIC DIFFICULTIES IN LEARNING TO READ

Next, two of the aforementioned reader profiles will be analyzed. The profile of poor decoders, especially when they keep their linguistic knowledge preserved; and the profile of specific difficulties in understanding texts, in particular, when maintaining adequate levels of oral language comprehension.

3.1. SPECIFIC LEARNING DISABILITY IN BASIC READING PROCESSES OR DYSLEXIA

An accepted and comprehensive definition of dyslexia is offered by the International Dyslexia Association (IDA, 2002; Lyon, et al., 2003, p.2):

"Dyslexia is a Specific Learning Disability of neurobiological origin. It is characterized by difficulties with accurate and / or fluent word recognition and poor spelling and decoding skills. These difficulties are usually the result of a deficit in the phonological component of language and are often unexpected in relation to other cognitive abilities of the subject and the provision of effective instruction in the classroom. As secondary consequences, there may be difficulties in reading comprehension and reduced reading experience, which can hinder the increase of vocabulary and general knowledge".

Here are some meanings of this definition:

The prevalence of dyslexia.

The data on the prevalence of dyslexia vary between 5-10%, and even, in some studies, it reaches up to 15% of the population (IDA, 2014). This wide range is justified because dyslexia is an arbitrary concept, not a categorical one, with a continuous distribution in the population (Artigas-Pallarés, 2009) and the cut-off point between dyslexia and normal reading depends on the diagnostic criteria adopted in the study. In addition, its incidence varies depending on the characteristics of the written code, since decoding is more difficult to learn in opaque languages than in transparent ones.

On the other hand, dyslexia affect more men than women in a ratio of two or three men to one woman (Katusic, et al., 2001). This distribution is due to the different brain configuration between both sexes.

Dyslexia is a specific learning disability of neurobiological origin.

The cause of dyslexia is organic. In 70% of cases of genetic origin. This implies that it affects the configuration of the brain from birth and does so permanently. That is, the disorder persists throughout life, although reading skills improve with practice.

There are two theories to explain the characteristics of dyslexia. Each of them locates the anatomophysiological differences in different areas of the brain. These are: at the cortical level and in the cerebellum.

The most widely studied and widely accepted theory in the scientific community is the cortical hypothesis. It is produced by focal damage (neurons and glia out of place or distortions) in cortical regions that intervene in the reading of words and in the comprehension of sentences (Galaburda, & Cestnick, 2003). These regions are:

- The left occipito-temporal zone, which converts graphemes into phonemes.
- The left frontal zone or Broca area, which is responsible for sequential aspects of the language, such as phonological programming and syntax.
- The left temporo-parietal zone, where the supramarginal region is responsible for phonological processing and writing; and the angular gyrus integrates multimodal information, auditory-visual and tactile, necessary to access the meaning of words and, therefore, in reading and in the writing of words and texts.

In recent decades, the hypothesis of cerebellar deficit (lateral parts of the left posterior lobe) has been investigated, which proposes a relationship between cerebellum and reading (Fulbright, et al. 1999), and / or between an alteration of the cerebellum and some of the dyslexic type symptoms (Moretti, et al., 2002). This subcortical structure has traditionally been related to balance, posture, movement, and motor coordination. But, now, it is being discovered that it also

acts in the automation of any skill, whether motor or cognitive, in the learning of language, reading and other cognitive processes such as attention and memory (Fawcett, & Nicolson, 2004). From that perspective, difficulties in learning motor sequences that some people with dyslexia present are also explained.

However, and regardless of where these neurological differences that hinder their reading skills are located, the genetic combination that configures their brain can favor other abilities (Artigas-Pallarés, 2009). Thus, they may have more talent for art, computing, design, theater, electronics, mathematics, mechanics, music, physics, sports ... But these skills in which they can excel are very diverse and they are not contrasted in the scientific literature.

Dyslexia is the result of a phonological deficit.

The hypothesis that for now best explains the reading difficulties of people with dyslexia is that of the deficit in the phonological component of language (Alegría, 2006; Reynolds, et al., 2003; Vellutino & Scanlon, 1982) which includes: difficulties with phonological awareness; in the fluid updating of the rules of grapheme-phoneme correspondence and in the auditory sequential working memory.

Phonological awareness is defined as the ability to identify and manipulate the sounds that words contain without having graphic support. Some of the tasks used to assess and / or develop phonological awareness are: identifying words that rhyme; count, identify, and manipulate syllables in a word; or identify and manipulate the phonemes of a word (remove, put, synthesize, analyze ...). These activities promote the correct spelling of words.

Faced with this theory of phonological deficit, according to which people with dyslexia find difficulties in the identification and manipulation of these sounds of the oral language and that is defended by the majority of the scientific community [[in fact it is part of the definition of dyslexia contributed by Lyon et al. (2003)]; The allophonic hypothesis of Serniclaes (2011) arises. According to which, instead of phonological deficit, people with dyslexia have a greater capacity to discriminate between sounds of the language, including the different ways of pronouncing the sounds or allophones. For example, the / b / for / babi / sounds differently at the beginning of the word -occlusive- than when it goes between vowels -fricative-.

Dyslexia is characterized by difficulties with accurate and / or fluent word recognition and poor spelling and decoding skills.

Following the hypothesis of the double route proposed by Morton (1969) and developed by many other authors (Coltheart, 1980; Marshall, & Newcombe, 1973), the reading of written words can be accessed in two ways: the sublexical or indirect way and the lexical or direct way.

- When it is read using the indirect pathway, the word is analyzed by graphic segments and, successively, they are translated into oral language. That is, it is read by applying the grapheme phoneme correspondence rule. It is also called auditory route because when using this route the word sounds in the mind of the reader. It is useful for reading new words and/or words with which the reader has had little reading experience, but it is only successful when the word is regular. In these cases, it provides reading accuracy. If the person makes mistakes using this route, they will commit serious phonological errors (omissions, substitutions, inversions, additions) or slight ones (syllabication, rectifications, repetitions or hesitations).
- When people read using the direct pathway, they analyze the word globally, recognize it by its graphic characteristics and access its meaning. It is also called visual pathway because the word is recognized at a glance. It can only be used with words with which the reader has had multiple reading experiences, otherwise these words could not be recognized. Its use is essential when the words are irregular, therefore, it is more necessary in opaque languages. This route provides speed. If the person makes a mistake using this route, they commit a paralexia, this can be of different types: if they substitute the word they have to read for another with which it shares visual characteristics, it is called visual paralexia; if it is changed for another word with which it shares the lexeme, but the morpheme varies, a derivational paralexia is performed; and if one word function is substituted for another, it is called functional paralexia.

Depending on the difficulties that the reader has in mastering these two pathways, three subtypes of dyslexic profiles have been identified: phonological, surface and mixed.

- Phonological dyslexia is caused by a lack of mastery of the indirect pathway. The person finds it very difficult to use the indirect route with new or infrequent words and often makes minor or serious phonological errors when reading them. But when they think they recognize a word, they take a risk and use the direct route. Many times they read words well in this way; but, they commit paralexias more frequently than normal readers.
- Surface dyslexia results from an inability to use the direct pathway. The reader fails to construct a visual neurological footprint for the words that are frequently encountered. You have to read all the words in the text indirectly, as if they were new. In this case, regular words can be read well by applying the grapheme / phoneme correspondence rule; but, in opaque languages they tend to regularize irregular words, committing many errors of precision. In transparent languages, a difficulty in a direct way causes slowness or a lack of reading fluency.
- Mixed dyslexia is characterized by difficulties, both indirectly and directly pathway.

On the other hand, these difficulties in reading or literacy can manifest themselves to different degrees. According to DSM V (American Psychiatric Association- APA, 2014), the degree of difficulty is a function of the intensity of the support required. Light degree when difficulties can be compensated with appropriate supports or when appropriate adaptations are applied in the school environment. Moderate degree, when intensive supports are required throughout the entire school stage. Severe degree, when it requires constant, specific, individualized and intensive teaching throughout the entire school stage.

There is no underlying problem behind dyslexia that is justified by its difficulties.

That is, the difficulties that people have to master these basic reading and / or literacy processes are not due to an intellectual, sensory or motor deficit. And

if these sensory or motor problems exist, they are either corrected or not serious enough to explain that poor decoding.

Nor is there an emotional problem at the beginning, such as depression or anxiety, that prevents their learning. If that were the case, they would require psychological therapy and family therapy. However, what does usually happen is that later they develop emotional problems (low self-esteem and anxiety) and behavioral problems as a consequence of a poor adaptation to school (Huang, et al., 2020; Zuppardo, et al., 2017).

In addition, the person has had to receive sufficient reading instruction. With the teachings received, the rest of their peers have learned. However, when this criterion is used, it should be verified that the instruction received has followed the guidelines indicated by scientific evidence, because not all interventions are sufficient or adequate.

Dyslexia can be accompanied by other difficulties.

Dyslexia can run along with other reading difficulties, such as difficulties in understanding texts; with writing difficulties, such as dysorthography, dysgraphia and composition of texts; with difficulties with mathematics, such as dyscalculia; with Developmental Language Disorders and with Attention Deficit Disorder.

The cause of these comorbidities is often that all these tasks share neurological mechanisms and structures. Especially, the use of working memory, the rapid retrieval of information from long-term memory to working memory and / or in the use of executive functions, which hinders the distribution of attention during the performance of the task.

3.2. SPECIFIC LEARNING DISABILITY IN COMPLEX READING PROCESSES

Between 20-25% of students may find it difficult to understand texts. Specifically (García et al., 2013), in a study carried out with 941 students of Compulsory Secondary Education (12-16 years olds), found that 22.1% of the students had difficulties in understanding texts and that they had different profiles: 7% of the students it was associated with decoding difficulty (dyslexia), 4.9% had a normal-low intellectual capacity (IQ less than 80), 3.1% their mother tongue was different from that of the school (immigrants or late incorporation),

0.5% were considered absentee students and 6.6% were identified as poor understanders: they decoded well, they understood oral language well, but found difficulties in understanding texts.

That is, there is a group of students (around 5-10%) who keep their decoding skills preserved. They can understand simple texts supported by their oral language skills and experiences. But they only achieve a superficial and sometimes even distorted understanding of the text when they are of greater lexical and grammatical complexity. That is, there is a gap between their reading skills and the reading activities that are demanded in the classroom (Flores, et al., 2015).

There are different factors that are influencing their reading performance and all of them are interconnected:

- **Vocabulary.** In order to interpret the texts, more than 90% of the words in the text must be known (Nagy & Scott, 2000); and with that known vocabulary inferences about the meanings of the new words will be made (Hirsch, 2003). But school texts contain vocabulary that is not usual in everyday language and poor comprehensors do not know that lexicon well (Catts, et al., 2006; Suárez, et al., 2010); and they find it difficult to infer the meaning of those words they do not know (Cain, et al., 2003).
- **Syntax.** Knowledge of syntax, in addition to facilitating word recognition, because it anticipates the category of words that can be written (Rego & Bryant, 1993); It contributes in the processing of the sentence, in the construction of the plot thread, in its anchoring within the text and in the supervision of the comprehension when possible syntactic errors are detected. Poor comprehensors use this syntactic awareness less for text comprehension (Cain, 2007; Flores, et al., 2015).
- **Identification of the topic of each paragraph.** In each paragraph a topic is discussed, about which different information is said and / or relationships are established with other concepts in the text. Poor understanding people find it difficult to find the specific topic of each paragraph (Oakhill, et al., 2005).

- **Use of macro rules.** Within written texts there are main ideas and secondary ideas that complete those main ideas. Depending on the characteristics of the text and the knowledge that the reader has on the subject, these main ideas can be extracted using simpler strategies or macro-rules, those of omission or selection; or more complex, those of generalization and integration (Van Dijk, 1980). Poor understanding students primarily use the basic strategies of deleting and selecting to find the main ideas and do not usually use the complex macro-rules of generalization and integration, for which they have to resort to previous knowledge on the subject (Brown, et al., 1983).
- **Text outline.** According to Meyer (1984), the main ideas of the expository texts can be related to each other, following five basic structures: description, comparison, sequence, cause effect and problem solution. Poor understanding students do not grasp the overall structure of the text. That is, they do not interrelate the basic ideas of the text and, instead, apply a listing strategy (Scardamalia, & Bereiter, 1984), a poorer text structure based on "subject plus detail" (Duke, 2014; McNamara, 2004; Meyer, 1975; Snyder & Caccamine, 2010).
- **Self-regulation.** Reading requires having a reading purpose and evaluating, as you read, if that reading objective is being achieved or if reading strategies must be modified to achieve it. Poor comprehensors show difficulties in self-regulating their own comprehension process (Flores, et al., 2010; Sánchez, 1998) and they do not adapt their reading speed to the complexity of the text (Flores et al., 2010).
- **Working memory.** To understand a text, at each moment of the reading activity the working memory must undertake a game of activation / deactivation of information to be able to manipulate the meaning of words, ideas derived from syntactic structures, the relationships between different parts of the text and connections with the reader's knowledge (van Dijk, 1980). Poor comprehensors are not skilled in this activation of relevant information / inhibition of non-relevant information, which

saturates the cognitive resources of working memory and causes poor reading performance (Abusamra, et al., 2007; Carretti, et al., 2005).

When reading practices are proposed, all these linguistic and cognitive aspects must be taken into account. Promote the strongest aspects and address weak points in a more specific way.

In summary:

Students must be taught Beck's type II vocabulary: complex text comprehension strategies and strategies for self-regulation of reading behavior.

The relevance of establishing a differentiated diagnosis of SpLD in reading is to guarantee the diversity of students the precise support they need (García, et al., 2013).

4. EDUCATIONAL POLICY IN ATTENTION TO DIVERSITY

Before presenting the policies on dyslexia in each of the consortium countries (Spain, Romania and Italy), a context of these policies at an international level is presented, and specifically in the European Union.

4.1 SPECIFIC LEARNING DISABILITY INTERNATIONAL EDUCATION POLICY: UNESCO AND AGENDA 2030

Dyslexia occurs in at least one in 10 people, putting more than 700 million children and adults worldwide at risk of life-long illiteracy and social exclusion. With a world population of more than 7 billion, this learning difference clearly impacts a considerable number of children and adults, with far-reaching consequences across life domains. Furthermore, significant numbers of students with dyslexia go undiagnosed and their symptoms unaddressed, with tragic results, due largely to global lack of awareness and knowledge about this common learning difference. Even in wealthier countries where public education is available for children of all backgrounds, disparate resources can leave great gaps in services available for students with special needs (Dyslexia International, 2017).

The United Nations Educational, Scientific, and Cultural Organization (UNESCO) reported that although countries around the world must ensure that students with disabilities receive free, inclusive, and appropriate education, students with disabilities are less likely to complete primary or secondary school in many countries. Though this is the case, very little has been published regarding the legislative efforts and the implementation of services and supports specifically for students with learning disabilities in reading or dyslexia around the world (Agrawal, et al., 2019).

The Convention on the Rights of Persons with Disabilities declares in the Art. 24 (United Nations, 2006):

1. States Parties recognize the right of persons with disabilities to education. With a view to realizing this right without discrimination and on the basis of equal opportunity, States Parties shall ensure an inclusive education system at all levels and lifelong learning directed to:

- The full development of human potential and sense of dignity and self-worth, and the strengthening of respect for human rights, fundamental freedoms and human diversity.
- The emotional development of people with disabilities, their talents and creativity, as well as their mental and physical abilities, to their fullest potential.
- Enabling persons with disabilities to participate effectively in a free society.

2. In realizing this right, States Parties shall ensure that:

- Persons with disabilities are not excluded from the general education system on the basis of disability, and that children with disabilities are not excluded from free and compulsory primary education, or from secondary education, on the basis of disability.
- Persons with disabilities can access an inclusive, quality and free primary education and secondary education on an equal basis with others in the communities in which they live.
- Reasonable accommodation of the individual's requirements is provided.
- Persons with disabilities receive the support required, within the general education system, to facilitate their effective education.
- Effective individualized support measures are provided in environments that maximize academic and social development, consistent with the goal of full inclusion.

In order to help ensure the realization of this right, States Parties shall take appropriate measures to employ teachers, including teachers with disabilities, who are qualified in sign language and / or Braille, and to train professionals and staff who work at all levels of education. Such training shall incorporate disability awareness and the use of appropriate augmentative and alternative modes, means and formats of communication, educational techniques and materials to support persons with disabilities (United Nations, 2006).

Therefore, although these days, increased attention and support is provided to students with learning disabilities around the world (Agrawal, et al., 2019) to reach individual equality and the achievement of social success, students of all nationalities and lifestyles should have access to teachers who are trained to recognize and address learning difficulties such as dyslexia (Dyslexia International, 2017).

To achieve that, UNESCO has made great efforts worldwide to promote educational inclusion. In 2000, at the World Education Forum in Dakar, the World Declaration on Education for All was signed. At that Forum, the World Declaration on Education for All, approved 10 years earlier in Jomtien, was ratified and concluded with the development of the Dakar Education for All Framework for Action (UNESCO, 2016).

To accomplish the objectives of the Education for All Framework for Action, governments, organizations, agencies, groups and associations represented at the World Education Forum committed (World Education Forum, 2000):

- To promote strong national and international political commitment to education for all, develop national plans of action and significantly increase investment in basic education.
- To promote the education for all policies within the framework of a well-integrated and sustainable sectoral activity, which was explicitly linked to the elimination of poverty and development strategies.
- To ensure the commitment and participation of civil society in the formulation, implementation and monitoring of education promotion strategies.

The Sustainable Development Goals (SDGs), adopted by the United Nations General Assembly in 2015, where the 2030 Agenda (UNESCO, 2016) is framed, presents the current ambitions for education that are essentially embodied in Sustainable Development Goal 4 (SDG 4) of the 2030 Agenda whose objectives are:

- To “ensure inclusive and equitable quality education and promote lifelong learning opportunities for all” by 2030. The roadmap to achieve the education goal, adopted in November 2015, provides guidance to

governments and partners on how to turn commitments into action (Education 2030 Framework for Action).

UNESCO is responsible for coordinating the international community to achieve this goal through partnerships, policy guidance, capacity development, monitoring and advocacy (UNESCO, 2016).

Specifically, point 5 of SDG4 clearly expresses those issues that education systems must address to be inclusive (UNESCO, 2016):

- By 2030, eliminate gender disparities in education and guarantee equal access for vulnerable people, including people with disabilities, indigenous peoples and children in vulnerable situations, at all levels of education and vocational training.

The Education 2030 framework action declares the importance of inclusion and equity and commits to addressing all forms of exclusion and marginalization, disparities and inequalities in access, participation and learning outcomes. No educational goal should be considered accomplished unless all achieve it. Therefore, there is a commitment to make the necessary changes in education policies and to focus all efforts on the most disadvantaged, especially those with disabilities, to ensure that no one is left behind (UNESCO, 2016).

While governments have the main responsibility to guarantee the right to quality education, the 2030 Agenda means an universal and collective commitment that requires political will, global and regional collaboration, as well as the commitment of all governments, civil society, the private sector, youth, the United Nations and other multilateral organizations to address educational challenges and build inclusive, equitable and relevant systems for all learners (UNESCO, 2016).

At the same time, to achieve the collective commitment, it is necessary to have statistical information for decision-making and the formation of educational policies, to have comparable information that allows to think about regional or sub-regional strategies, to follow up and monitor the progress and progress of the right to education. Which at the national and regional level means improving and expanding the coverage of educational statistics that reflect and account for the region's progress towards inclusive, quality education for all and without any type

of discrimination. As well as ensuring the right to quality and inclusive education for the population with disabilities as established in the Convention on the Rights of Persons with Disabilities, which requires permanent monitoring to identify progress and challenges (UNESCO, 2016).

To sum up, since the adoption of the Sustainable Development Goals and the 2030 Agenda, the European Union's intentions to face the needs and challenges of children with learning difficulties, dyslexia, and other disabilities have been reflected in the objectives and agreements carried out by the countries. However, to assess the implementation of the goals mentioned, the special situation of the last year must be taken into account since during the COVID-19 pandemic, many schools are offering remote learning to students through virtual classrooms to mitigate the impact of school closings. While this is an option for some, it is out of reach for many because it ends up affecting Goal 4, which aims to keep children in school and ensure that they complete their education. Months of absence from school due to COVID-19 are likely to affect educational outcomes. In the long term, prolonged absence from school is associated with lower retention and graduation rates and poorer learning outcomes, particularly among segments of the population that are already disadvantaged, including members of poor households and students with disabilities (United Nations, 2020).

4.2 SPECIFIC LEARNING DISABILITY IN THE EDUCATION POLICY OF THE EUROPEAN UNION

Regarding dyslexia policies across the European Union there is no uniformity in terms of evaluations, training, and recognition of experts. Most states mention dyslexia in their educational policies, but only a few countries provide standardized assessment, or they do not have an official definition of dyslexia at the national level. In sum, among the EU countries, different realities have been detected in the treatment and inclusion of individuals with dyslexia.

Dyslang, a project with funding from the European Commission in 2012, also demonstrated a lot of diversity is present across Europe about issues related to dyslexia. Different countries adopt different definitions, have different rules concerning diagnosis and different regulations regarding support measures for dyslexic pupils and students (Broadbent, 2018).

At the European Union level, inclusive education has been put high on the education agenda. One of the six axes of the European Education Area¹ is dedicated to inclusive education and lifelong learning for all, starting with early childhood education and care. Related initiatives such as the Pathways to School Success initiative have a special focus on groups at risk such as pupils with disabilities and special educational needs (European Commission, 2021).

On the other hand, the European Commission has published a new strategy for the rights of persons with disabilities for the next 10 years. Aiming at improving the living conditions of 100 million European citizens with disabilities, this strategy constitutes a roadmap for the Union and the Member States by 2030. The 2021-2030 strategy aims to ensure the full participation of people with disabilities. This participation must be reflected in all policies (health, employment, education, etc.) (European Dyslexia Association- Eda, 2021).

Education policies will continue to be supported by the European Agency for Special Needs and Inclusive Education. The Commission will collect policies and practices promoting educational achievements of persons with disabilities in the Member States, to continue improving policy making. Synergies with a view to access and quality of education including early childhood and care will be exploited with the forthcoming European Union Strategy 1 The European Education Area seeks to foster cooperation between European Union Member States to further enrich the quality and inclusiveness of national education and training systems on the Rights of the Child and the European Child Guarantee (European Commission, 2021). Nevertheless, each European Union country is responsible for its own education and training systems.

This Strategy will enhance cooperation for national reforms for inclusive education and exploit opportunities for synergies between the European Education Area, the European Skills Agenda, the Digital Education Action Plan and the European Research Area, and also between the Erasmus + and other European Union funding instruments (European Commission, 2021). The Commission will (Eda, 2021):

- Issue in 2021 a toolkit for inclusion in early childhood education and care, which includes a specific chapter on children with disabilities.

- Support Member States to further develop their teacher education systems to address shortages of teachers in Special Needs Education and competences of all education professionals to manage diversity in the classroom and develop inclusive education.
- Support increased efforts to implement the Action Plan Educational Support and Inclusive Education focusing on accessibility and reasonable accommodation, adaptation of their curricula to the needs of learners with disabilities (eg. alternative leaving certificates allowing for continuation of education at national level) and on providing training courses for teachers in the area of inclusive education.

The Commission calls on Member States (Eda, 2021):

- To support the development of inclusive schools that can become a reference in inclusive and innovative teaching and learning across the EU along the objectives of the European Education Area and the Digital Education Action Plan.
- To ensure that their education systems at all levels comply with the Convention on the Rights of Persons with Disabilities to advance on supported learning in inclusive mainstream settings, as announced in the Communication on the European Education Area.
- To support the implementation of Art. 24 Convention on the Rights of Persons with Disabilities in the European Schools (abovementioned).

For the European Education Area to become a reality by 2025, an enabling framework will be put in place. The Commission proposes to continue cooperation with Member States in the existing setting of working groups and meetings. The Framework will also facilitate cooperation with civil society and researchers. Together with Member States, the Commission will set up a steering board to guide the work of all involved in building the European Education Area (European Commission, 2020).

4.3 SPECIFIC LEARNING DISABILITY IN THE EDUCATIONAL POLICY OF THE PARTICIPATING COUNTRIES

4.3.1. IN SPAIN

The Spanish policies that promote the educational care of children with support needs have a prominent starting point in the 1978 Constitution. Articles 27 and 49 consolidate the right to education for all Spanish citizens. A few years later, this right was developed with the Law of Social Integration of the Disabled (LISMI, 1982), which is the first regulation that collects the basis of the integrating process of all boys and girls in the educational system, particularly those who present disability, but that will serve as the beginning of educational attention to diversity in general.

Thus, in 1985, the process of school integration in Spain, regulated by the Royal Decree 334 on the Special Education Organization (3/6/85), which contemplated, among other measures, the following:

- Ordinary schools will be provided with support services that affect their dynamics to prevent school failure, avoiding segregation and facilitating integration.
- Educational care must begin at the time of detection of problems or deficiencies, counting on the collaboration of parents at all times.
- The support services will include the functions of assessment and orientation, as well as pedagogical reinforcement and treatment. Multiprofessional Teams are made up of a group of professionals who act in the educational process of the child.
- The commitment is made to generalize the integration in eight years. The importance of primary education teachers being aware of the students' main difficulties is highlighted, so measures are foreseen both for initial training and for the improvement and updating of the teaching staff.

The Law of General Organization of the Educational System (LOGSE, 1990) would definitively regulate integration / inclusion in Spain. The concept of special educational needs (SEN) is used for the first time in the national educational regulations. In order to deal with the problems that had been detected in the

experimental period of school integration, Royal Decree 696/1995, of April 28, on the Regulation of Education for students with SEN was approved. This norm introduces notable novelties in Spanish politics, originating from pioneering documents such as the Warnock Report of 1978:

1. It contemplates both the educational needs of a permanent nature, as well as the temporary or transitory ones.
2. It recognizes as SEN that have their origin in the sociocultural framework or in the educational and school history of the students, as well as those that are associated with personal conditions of disability or an intellectual giftedness.

In the LOGSE, within the concept of SEN, all the types of difficulties that students may present are grouped (due to learning difficulties, disabilities, high capacities ...). This would be changed later with the following education law.

The Organic Law of Education (LOE, 2006) and the Law for the Improvement of Educational Quality (LOMCE, 2013) continue to assume inclusion as a fundamental principle and reiterate that the centers will have the educational, human and material resources necessary to offer education quality and guarantee equal opportunities in education.

The LOE, in its Title II, dedicated to equity in education, contemplates a new classification and denomination of students who need educational attention different from the ordinary one: Students with Specific Need for Educational Support (SESN). These students are those who are now grouped into the following categories: special educational needs (SESN, where only those with disabilities and developmental and behavioral disorders are collected), maturational delay, language and communication development disorders, attention or learning disorders, serious ignorance of the language of learning, being in a situation of socio-educational vulnerability, high intellectual abilities, late incorporation to the educational system or personal conditions or school history.

The Law for the Improvement of Educational Quality (LOMCE, 2013) maintains a good part of what is indicated in the LOE regarding attention to diversity. Specifically, Art. 79 bis refers to the schooling and care measures for students with SpLD that will be carried out to identify and assess their needs early

and ensure that their schooling is based on the principles of normalization and inclusion. It includes the group of Attention Deficit Disorders with or without Hyperactivity (ADHD) within the Student Body in need of educational support.

The current Organic Law 3/2020, of December 29, which modifies Organic Law 2/2006, of May 3, on Education (LOMLOE, 2020) maintains in our field of work the same indications of the laws that precede it (LOE and LOMCE). Figure 3 summarizes the main rules that regulate educational care for students with support needs in Spain in the last forty years.

Figure 3. Main rules that regulate the care of students with educational support needs in Spain.

SPANISH CONSTITUTION (12/6/78)	Art. 27 and 49
Law of Social Integration of the Handicapped (LISMI, 1982)	Art. 23-26 and 30 Contextualizes the first measures of school integration.
Royal Decree 334/1985, of March 6, on the Organization of Special Education	The school integration process in Spain is launched.
Law of General Organization of the Educational System (LOGSE, 1990)	Art. 3, 36 and 37
Royal Decree 696/1995, of April 28, on the Regulation of Education of students with SEN	Development of the LOGSE
Organic Law of Education (LOE, 2006)	Title II. Chapter I
Law for the Improvement of Educational Quality (LOMCE, 2013)	Art. 79 bis. Schooling and care measures for students with AED
Organic Law of Education (LOMLOE, 2020)	Chapter II. Equity and compensation for inequalities in education

Source: self made.

In Spain, the Student with a SESN is one who requires and receives educational attention different from the ordinary one, for presenting special educational needs, for SpLD, ADHD, for their high intellectual abilities, for having incorporated late to the educational system, or due to personal conditions or school history (LOMCE, 2013).

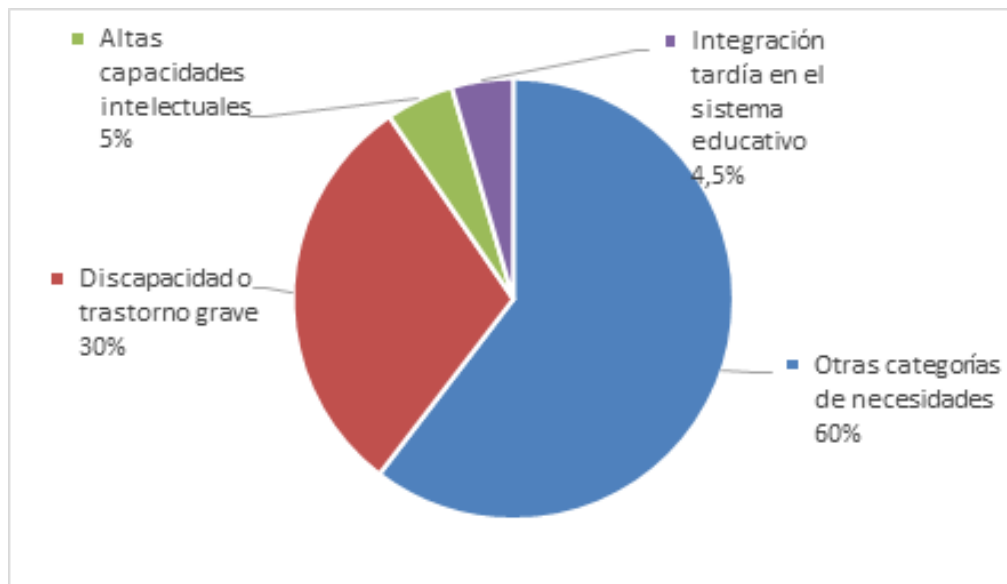
The Ministry of Education and Vocational Training (2020) published the study "Attention to students with dyslexia in the educational system in the context of the specific needs of educational support" where the situation of attention to SpLD and, specifically of dyslexia in the Spanish educational system, also contemplating the regulations of the different Autonomous Communities.

A recent work by the Ministry of Education and Vocational Training, coordinated by Manzano-Soto (2021), reviews and updates all the state and regional regulations regarding students with SESN, among which are those boys and girls with SpLD / dyslexia, as well as what concerns the professionals and teams that work in their educational care.

The inclusion of students with SESN has experienced great progress in Spain, although the 2008 economic crisis and cutbacks policies with little social sense have also led to significant setbacks (Committee on the Rights of Persons with Disabilities, 2018).

According to the work of Lezcano-Barbero and Casado Muñoz (2021) prepared with statistical data from the Ministry of Education and Vocational Training (hereinafter, MEFP) (2020), in the 2018-2019 academic year, in Spain the total number of students with SESN that received educational attention different from the ordinary one amounted to 707,405, which represents 8.8% of the total number of students. The percentage of men (3.5%) with special educational needs is double that of women (1.7%). Of the total number of students with SESN, 212,807 (30.1%) correspond to the category of special educational needs associated with disability or serious disorder; 212,807 (5.0%) to high intellectual capacities; 31,605 (4.5%) to late integration into the educational system and 427,499 (60.4%) to other categories of needs (Figure 4).

Figure 4. Percentage of students by type of special educational needs in Spain in the 2018-2019 academic year.



Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

4.3.1.1 Student with a Specific Need for Educational Support

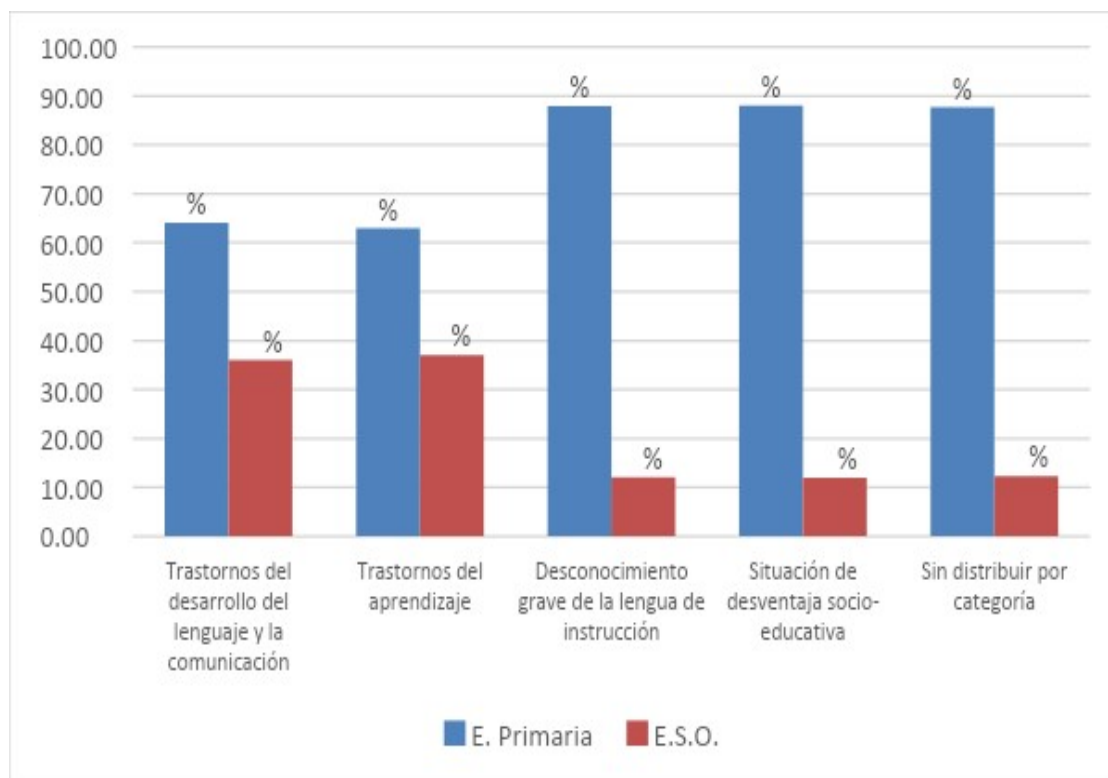
According to type of need

In Spain, according to the MEFP (2020), students with SESN are classified into the following categories:

- Students who present SESN: It is defined as the students valued as such by the educational guidance equipment or services that require for a period of their schooling or throughout it, certain specific educational supports and care associated with disabilities or serious disorders, such as
 - Hearing impairment
 - Motor disability
 - Intellectual disability
 - Visual disability
 - Pervasive developmental disorders
 - Severe conduct / personality disorders

- Multi-deficiency
- Students with high intellectual abilities: Students who receive educational attention through specific measures (curricular adaptations to deepen or expand the curriculum, make the school enrollment period more flexible, and / or participate in extracurricular enrichment programs). The total number of students of this type in the 2018-2019 academic year was 35,494, which corresponds to 5% of the total number of students with specific need for educational support.
- Students with late integration into the Spanish educational system: Students from other countries are considered as such who, in the reference school year, have been incorporated into the compulsory teachings of the spanish educational system and are in at least one of the following situations: a) he / she is enrolled in one or two grades lower than the one corresponding to his / her age; b) receives temporary specific educational attention aimed at facilitating their school inclusion, the recovery of the detected curricular gap, or mastery of the vehicular language of the teaching process. It represents 4.5% of students, 31,605 specifically.
- Other categories of students with SESN (Figure 5):
 - Language and communication development disorders.
 - Learning disorders.
 - Serious lack of knowledge of the language of instruction.
 - Socio-educational disadvantage.
 - Not distributed by category.

Figure 5. Rate of students in other categories with specific educational support needs



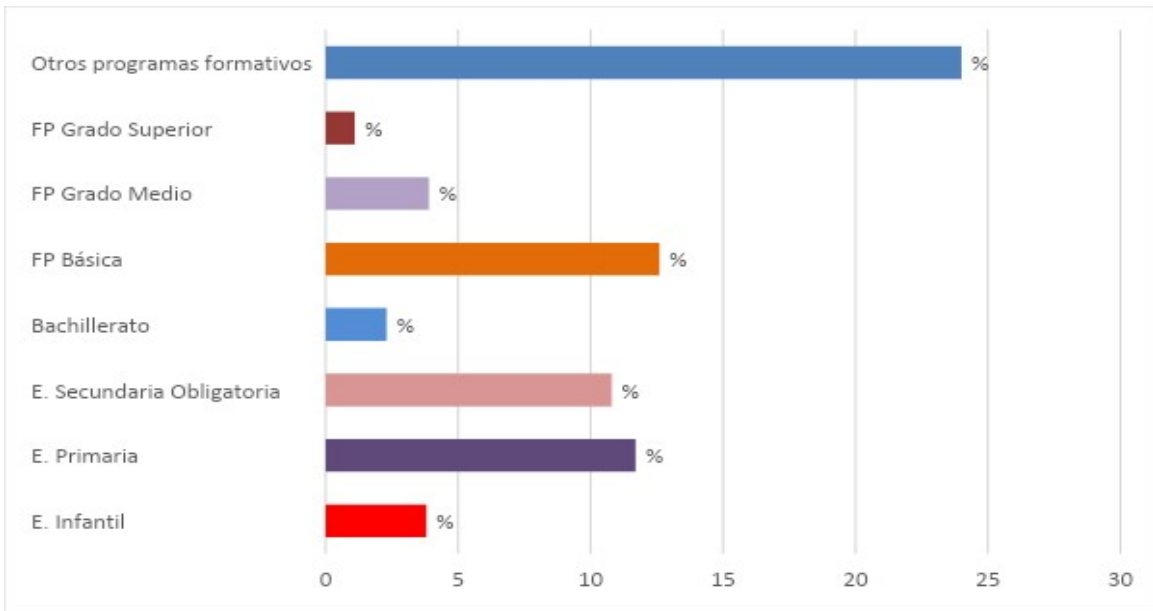
Source: Lezcano-Barbero and Casado- Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

The student body included in this group is made up of a total of 472,570 individuals, corresponding to 147,623 students with learning disorders, 211,333 students with language and communication disorders, 39,306 students in socio-educational disadvantage and 56,807 students with serious ignorance of the language of instruction. In addition, there are 17,501 students not distributed by these categories.

Accordinging type of teaching

Regarding the teachings in which these students are enrolled, basic education (Primary Education, ESO and Special Education) concentrates the largest number, 595,564 specifically out of a total of 707,405 (Figure 6). Data from Special Education Centers and Other specific Special Education programs are excluded in Figure 5, since in both cases they are 100% of the students belonging to SEN.

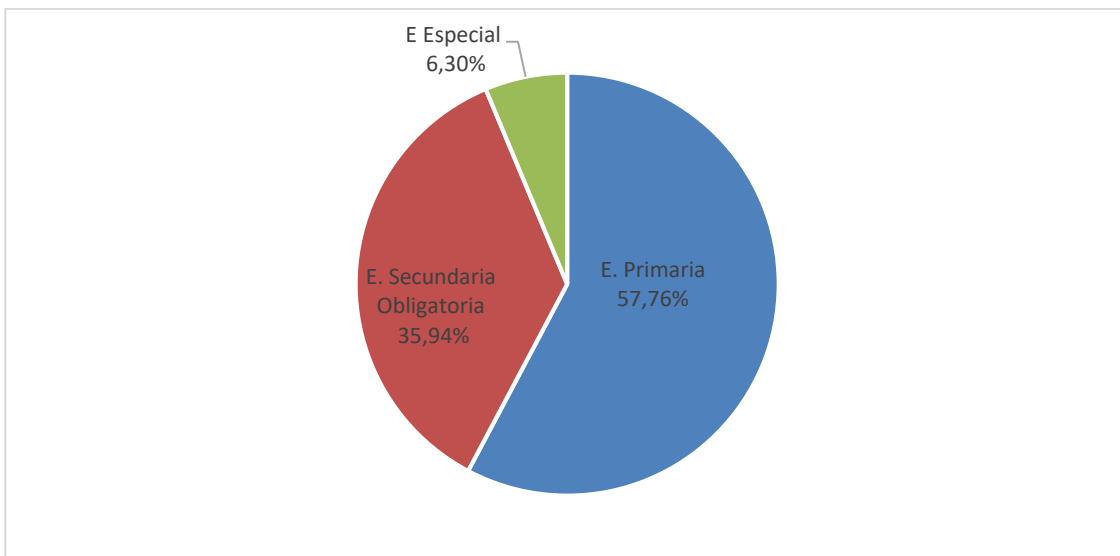
Figure 6. Students with NEAE according to type of education in the year 2018-2019.



Source: Lezcano-Barbero and Casado- Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

With regard to basic education, the largest number of students is concentrated in Primary Education with 343,995 students, followed by ESO with 214,070 and finally, Special Education with 37,499 students (Figure 7).

Figure 7. Students with specific need for educational support in basic education

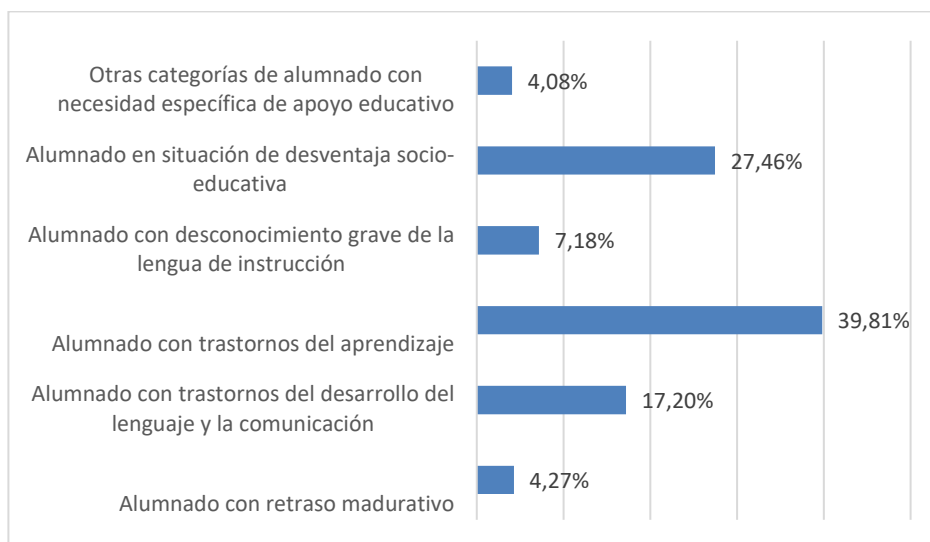


Source: Lezcano-Barbero and Casado- Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

Other categories of needs

In other categories there are 428,582 individuals, representing 4.63% of the students. The distribution is shown in Figure 8.

Figure 8. Percentage of students included in Other categories of needs



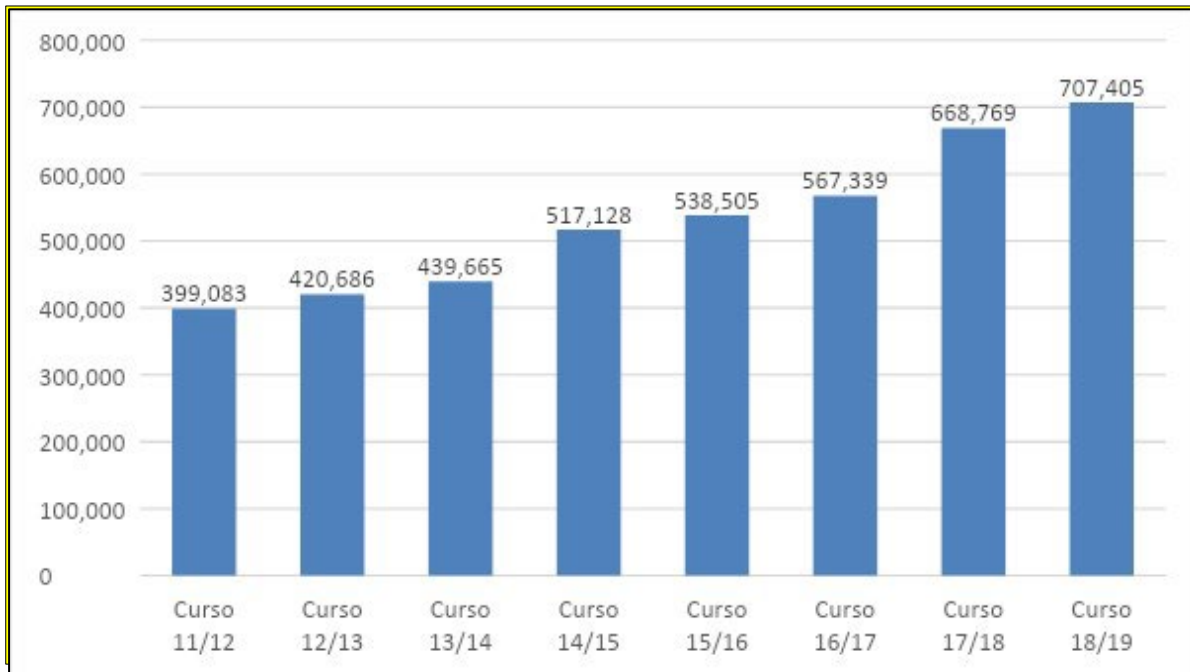
Source: Lezcano-Barbero and Casado- Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

The highest number corresponds to 170,605 students with learning disorders, which corresponds to 39.81%; 117,674 students in a socio-educational disadvantage, corresponding to 27.46% and 73,707 students with language and communication development disorders, which is 17.2%.

4.3.1.2 Data analysis from the academic year 2011-2012 to 2018-2019 in Spain

In Figure 9 it can be seen that the number of students with special educational needs has been increasing from the 2011-2012 academic year to 2018-2019. Specifically, there is a difference of 308,322 from the first year analyzed to the last.

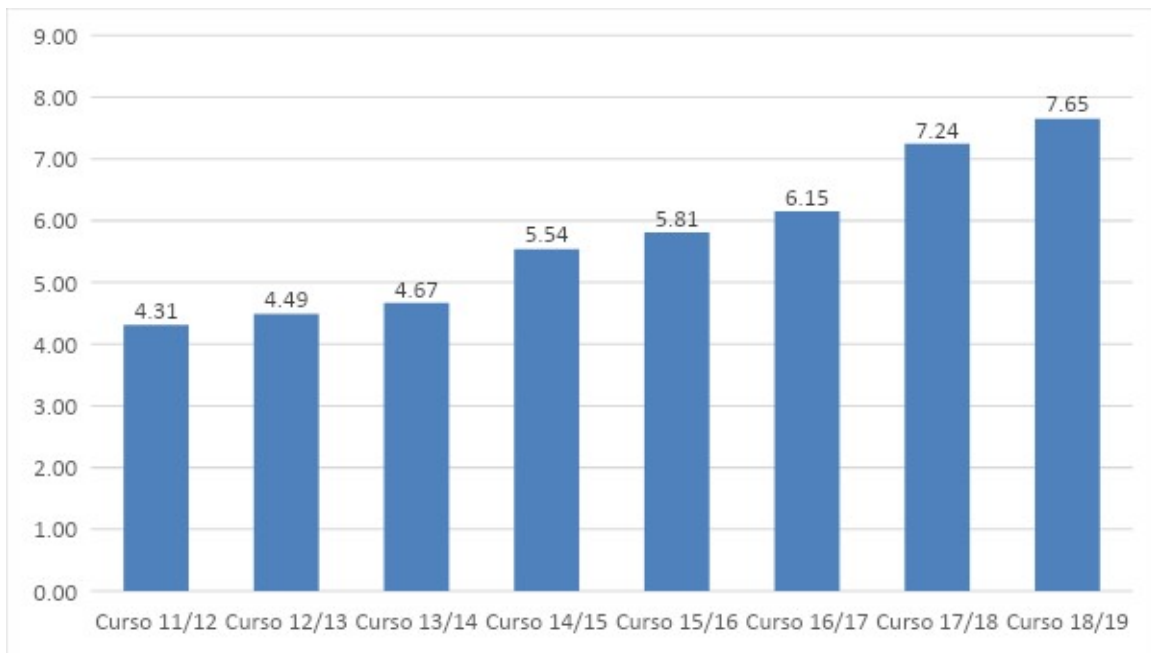
Figure 9. Number of students with SESN from the academic year 2011-2012 to 2018-2019.



Source: Lezcano-Barbero and Casado- Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

Likewise, we observe the percentage evolution of students with SESN throughout the following historical series in Figure 10.

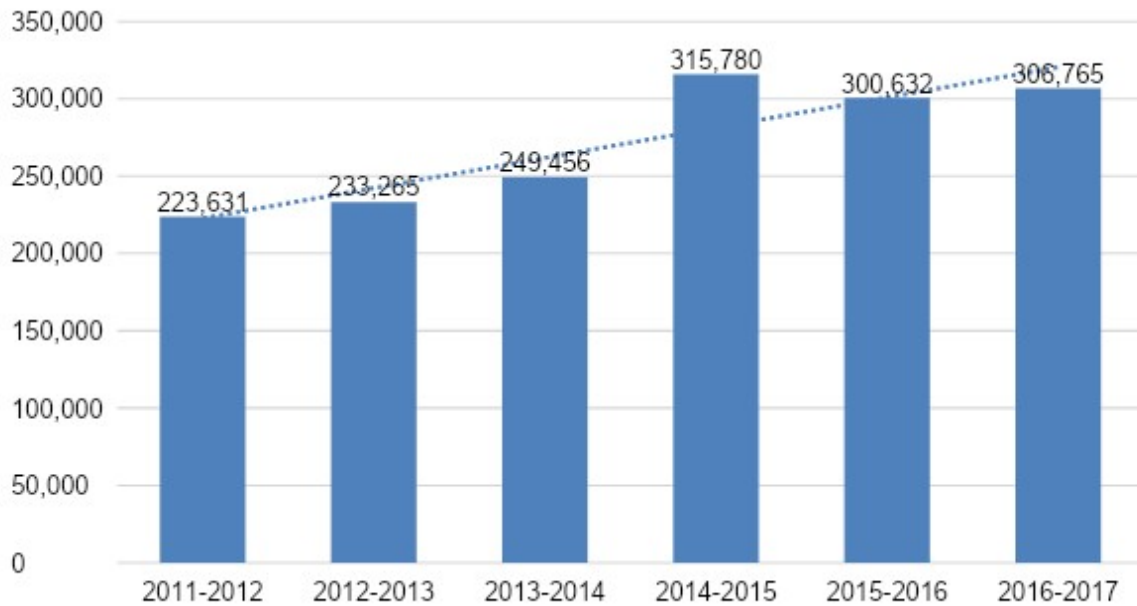
Figure 10. Evolution of the percentage of students with Specific Educational Support Needs from 2011-2012 to 2018-2019.



Source: Source: Lezcano-Barbero and Casado- Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

We can see that the data have a process of constant increase (Figure 10) although the number of students does not always increase as shown below. In the case of students from other SESN categories, it has been increasing, but not as noticeably as other categories. Even in Figure 11 it can be seen that in the 2015-2016 academic year it decreased again.

Figure 11. Evolution of the number of students from other categories who have received support from SESN from the 2011-2012 to 2016-2017 academic year in Spain.



Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

4.3.1.3. Dyslexia organizations in Spain

On the other hand, civil society, organized in associations of fathers, mothers and affected persons, has an important role in promoting the educational and social inclusion of different groups with educational support needs. According to Terrados López (2020), Spain currently has 2 national federations of family members and people with dyslexia and 36 regional associations. The first association created is the Catalan Association for Dyslexia (it was established in 1992) in Barcelona, and Other Specific Difficulties, which is still in force and is a member of the European Association for Dyslexia. Figure 12 shows the geographical distribution of the associations in Spain.

Figure 12. Geographic distribution of dyslexia associations in Spain.



Source: Terrados López (2020).

Children with dyslexia themselves, as the Spain Children's Platform (2021) states, “believe that some of their centers are doing some things well to be inclusive and that on this aspect they are improving, but they also talk about the path that is still there is still to go: I have dyslexia and they don't give me adapted tests, that's why I get bad grades” (Rivas Vaciamadrid Children's and Youth Forum, Madrid).

4.3.1.4. Attention to diversity in the Autonomous Community of Castilla-León

The territorial organization of the Spanish State is based on a decentralized model, with 17 autonomous communities or regions with educational competencies transferred from the 1999-2000 academic year, so they are responsible for the regulatory development in their territories, within the general framework of a national inclusive model (Casanova, 2011).

Socio-demographic and educational contexts of the region

The territory of the community of Castilla - León has 94,227 km², being the largest region in Spain and the third largest in the entire European Union (EU-28) (Junta de Castilla - León, 2017a). With a population of 2,424,395 inhabitants (data as of January 1, 2017), the density of the region stands at 25.7 inhabitants per km², compared to 92 on the Spanish average. It is made up of 9 provinces and 2,248 municipalities (more than a quarter of the total number of Spanish municipalities), these being small in size (88.6% of the municipalities have less than 1,000 inhabitants).

Rurality and geographic dispersion are particular characteristics of the region that require specific consideration and are considered in the II Plan for Attention to Diversity in Education (Junta de Castilla - León, 2017b).

According to UNICEF (2014, p.58):

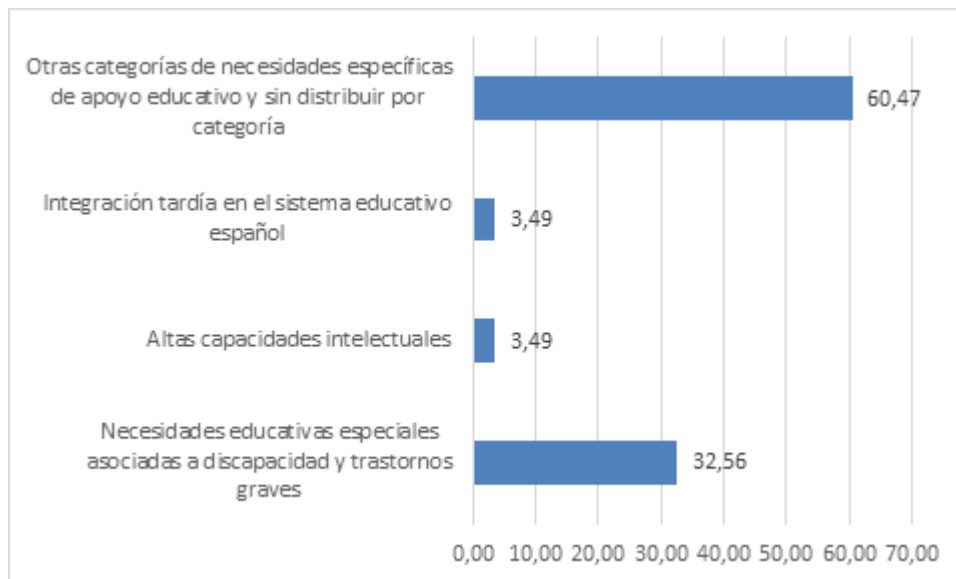
"The community of Castilla - León has 378,172 boys and girls, which represents 15.35% of the total population of the community (2,480,000 people). Of them, 9.2% are of foreign origin. It is the third Autonomous Community with the smallest child population in the entire State".

The region has assumed educational competencies since 2000 and has been obtaining high values in international evaluations (PISA and TIMSS) in recent years, "the result of quality and equity levels", according to regional educational authorities (Junta de Castilla - León, 2017b). The community of Castilla - León had 9,669 students with SEN enrolled in pre-university education in the 2014/15 academic year, of which 8,380 are in ordinary centers. 65.8% of them study in ordinary public schools (MECD, 2018).

According to the Junta de Castilla - León, in the 2018-2019 academic year a total of 414,754 students enrolled in non-university education, of which 35,668, 8.6%, were with SEN. The following graph shows the distribution of these data.

Figure 13 shows the rate relative to the different types of Students with SEN.

Figure 13. Percentage of students according to the type of need for educational support in Castilla - León in the 2018-2019 academic year.

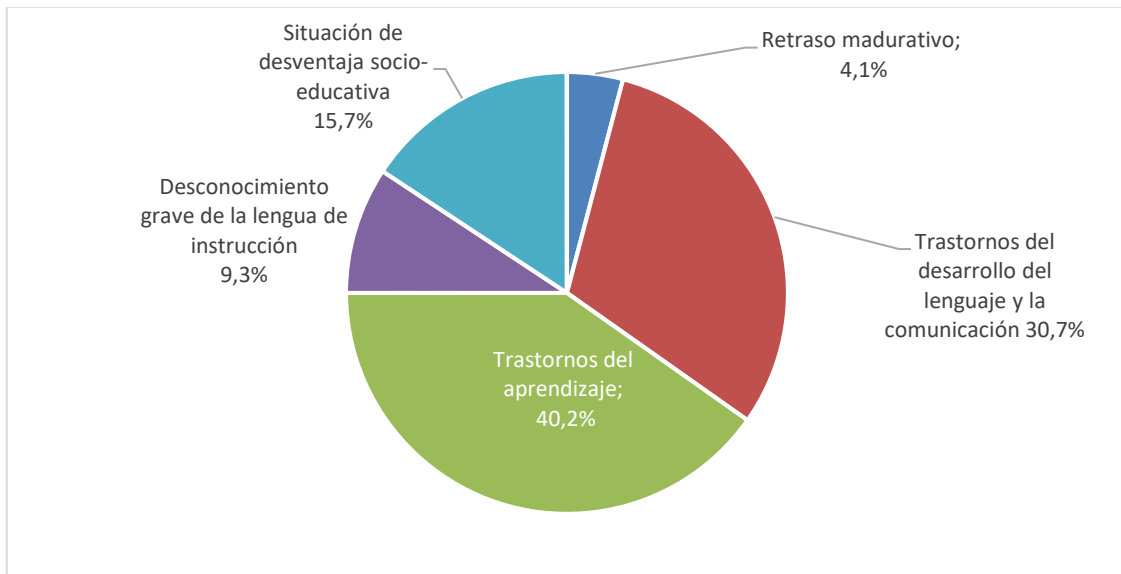


Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

DEA included in Other categories of Specific Need for Education Support

In "Other SESN categories" in the community of Castilla - León, in the 2018-2019 academic year, there were a total of 17,599 students. Of these, 720 (4.1%) with maturational delay, 5,400 (30.7%) with language and communication development disorders, 7,079 (40.2%) related to learning disorders, 1,635 (9.3%) due to serious ignorance of the language of instruction and 2,764 (15.7%) students in a socio-educational disadvantage situation. We found 1 case that is not included in any of the previous categories. In Figure 14 the rate of these data is represented.

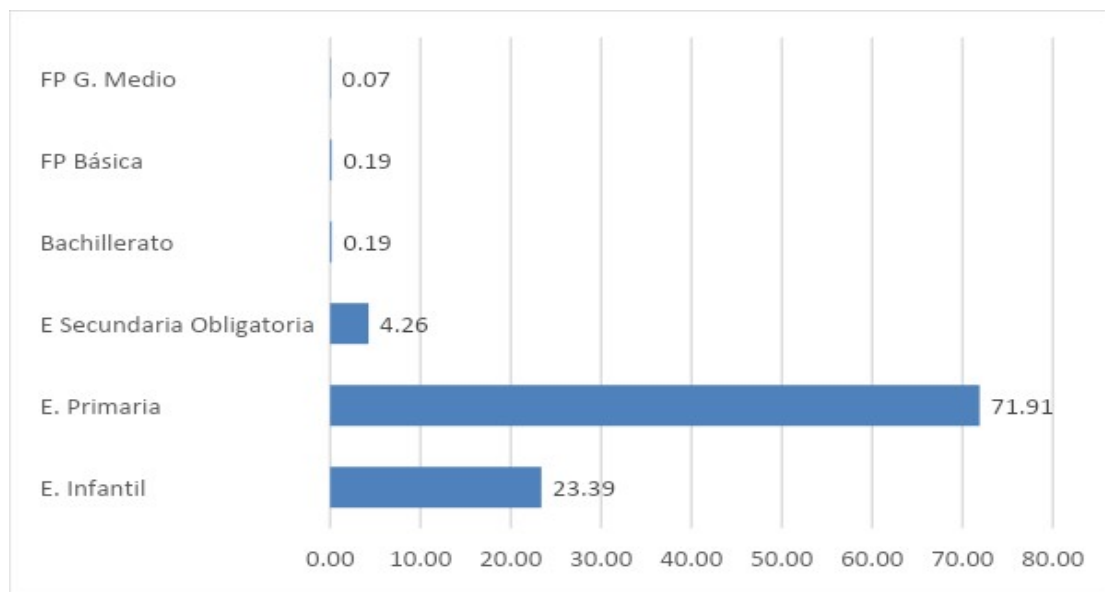
Figure 14. Students with other categories of specific need for educational support in Castilla - León in the 2018-2019 academic year.



Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

The distribution of students with language and communication disorders is unevenly distributed by the different educational stages, as shown in Figure 15.

Figure 15. Rate of students with language and communication disorders at different educational levels.

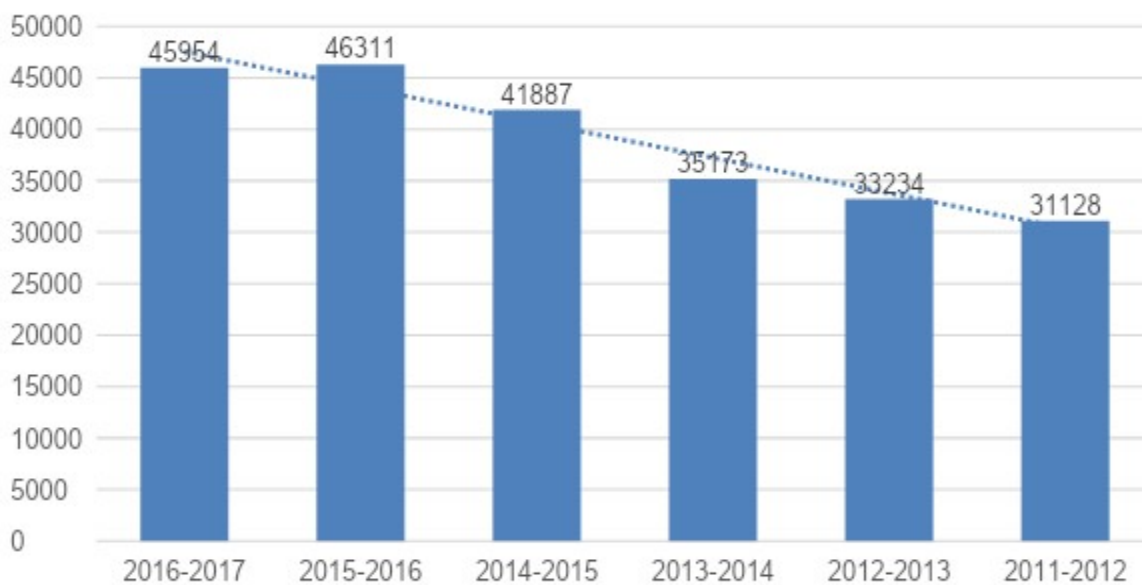


Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

Evolution of the number of students with Specific Need for Educational Support 2017 in Castilla - León from academic year 2011-2012 to 2016-2017.

In Figure 16 it can be seen that the number of students with SEN enrolled in the Community of Castilla - León has grown from the 2011-2012 academic year to 2016-2017. Specifically, there is a difference of 14,826 fewer students from the first year analyzed to the last.

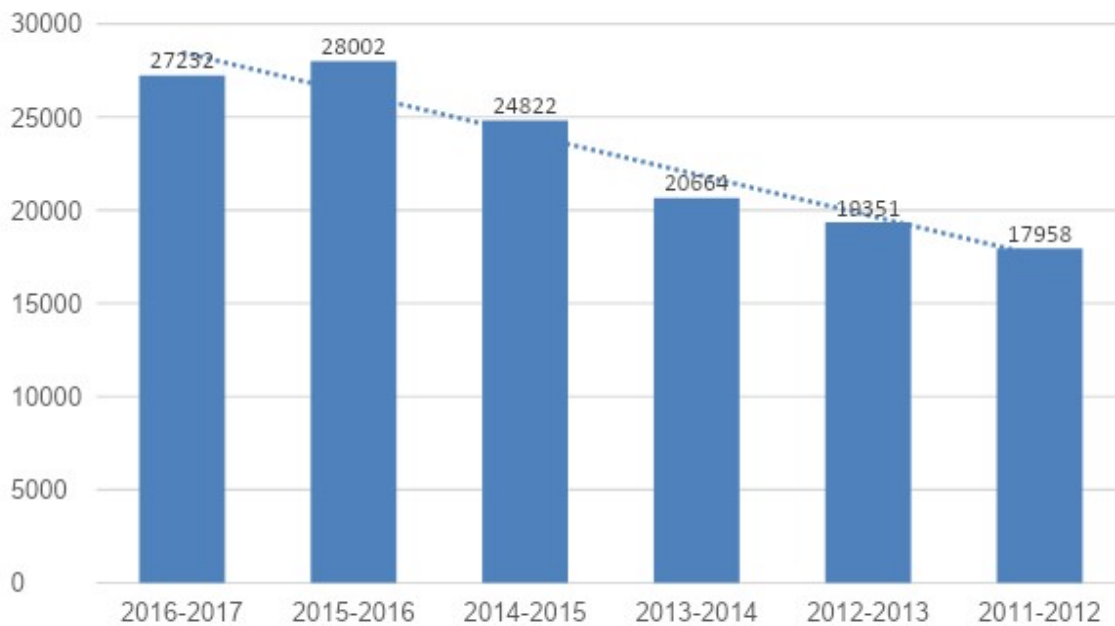
Figure 16. Evolution of students with SEN enrolled in Castilla - León according to the 2011/12 to 2016/17 academic year.



Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

In the case of students from other SEN categories, the number of enrollments has also increased throughout the analyzed courses. Figure 17 shows the data according to the academic year.

Figure 17. Number of students from other categories that have received support from SESN from the 2011-2012 to 2016-2017 academic year in Castilla - León.



Source: Lezcano-Barbero and Casado-Muñoz (2021), based on the Ministry of Education and Professional Training (2020).

The presence of Language Disorders in the Community of Castilla - León is found primarily in public centers at 6.2%, the rest (23.8%) are in private centers.

The most recent regional standard for the development of a more inclusive educational system is the II Plan for Attention to Diversity in Education in Castilla - León 2017-2022 (Junta de Castilla - León, 2017b). The purpose of the Plan is to advance towards the paradigm of educational inclusion and "serve as a framework, reference, and scenario for Equity" (p.4). Among the strategic lines it raises, the promotion and dissemination of inclusive research and good practices will have an important place. It also proposes 6 new strategic lines based on principles of equity, inclusion, accessibility and participation, among others.

ORDER EDU / 1152/2010, of August 3rd, which regulates the educational response to students with a specific need for schooled educational support in the second cycle of EI (3 to 6 years old), EP (6 to 12 years old), ESO (12 to 16 years old), Baccalaureate and Special Education (BOCYL of 13 of August) indicates that the group of students with "specific educational support needs" (NEAE) includes: Students with Special Educational Needs (disabilities and / or serious conduct

disorders); Maturation Delay; Students with Educational Compensation Needs; High Intellectual Abilities; Communication and Language Alterations; SpLD; and Limit Intellectual Capacity.

More specifically, according to the Instruction of August 24th, 2017 of the General Directorate of Innovation and Educational Equity, which establishes the procedure for collecting and processing data relating to students with specific needs for educational support in school in educational centers of Castilla - León, it is understood by students with need for educational and the different groups are categorized.

In summary:

Students who require educational attention different from the ordinary one in order to achieve the maximum development possible of their personal abilities and, in any case, the objectives established in general for all students, to present:

- a. Special Educational Needs (SEN).
- b. Educational Compensation Needs (ECN).
- c. High intellectual abilities.
- d. Learning difficulties or poor academic performance.
- e. Attention deficit hyperactivity disorder (ADHD).

These five groups are subdivided into different types and categories that are described below.

a. Students with Special Educational Needs (SEN)

It includes students with disabilities (psychic, motor, hearing, visual), severe personality and developmental disorder, and severe conduct disorder. It affects the individual in all areas of their life and they need specific attention. Depending

on their severity, they can go to an ordinary center (preferential schooling or not) or to a specific special education center.

These SENs can be broken down into ten subcategories:

- Physical-motor disability: non-motor and motor.
- Intellectual disability: mild, moderate, severe and profound.
- Hearing impairment: medium, severe, profound and cofosis.
- Visual impairment: visual impairment and blindness.
- Other disabilities.
- Maturational delay: when they are already in the 2nd cycle of Early Childhood Education and when the diagnosis is imprecise and transitory.
- Autism Spectrum Disorder: Autistic Disorder, High Functioning Autism Spectrum Disorder, Childhood Disintegrative Disorder, Unspecified Generalized Disorder.
- Very significant communication and language disorders: Specific Language Disorders (SpLD), dysphasias and aphasias.
- Serious personality disorders.
- Serious conduct disorders.

b. Students with Educational Compensation Needs (ECN)

Students who, due to different external or environmental causes, present or may present a gap of two or more courses in learning in instrumental areas and need specific attention. It covers three subcategories:

- Late incorporation students: immigrants with ignorance of the language and / or with a curricular gap (from 2 or more courses in curricular areas); Spanish citizens with ignorance of the language and / or curricular gap. That is, students who, due to a lack of mastery of the language, the host culture or poor previous schooling, show a curricular gap.
- Students with special geographical and social-cultural conditions: students who belong to minorities, who come from disadvantaged backgrounds; social exclusion, seasonal workers and showmen; by geographic isolation.

- Students with special personal conditions due to prolonged convalescence, hospitalization, special legal situation, high artistic performance, high sports performance.

c. High-ability students

Pupils whose intellectual abilities are significantly above average. These skills in which they stand out may be different, based on this we talk about the following categories:

- Intellectual giftedness.
- Simple or complex talent.
- Intellectual precocity.

d. Learning difficulties and / or low academic performance

- Significant communication and language disorders: In addition to those named in the SEN category, there are: mutism, dysarthria, dysglossia, dysphemia and simple language delay.
- Non-significant communication and language disorder: dyslalia, dysphonia.
- Specific learning difficulties: reading, writing, math, literacy.
- Limit intellectual capacity: slow learning students.

e. Attention Deficit Hyperactivity Disorder (ADHD)

One of the novelties of this regulation with respect to dyslexia is that it was included within the Group of SLpD and / or low academic performance / Specific literacy learning difficulties, without its specific mention even appearing.

This fact motivated the complaint of organizations of relatives and affected people before the Common Procurator of Castilla - León (the regional Ombudsman) that issued the Resolution of 05/02/2018 - Ministry of Education. In it, the "Procurador del Común ex officio" addressed the problems presented by students with dyslexia, a disease classified by the WHO and which, broadly speaking, is defined as a specific learning disorder... Among other recommendations, he makes the following:

"That the convenience of attributing the range of specific typology to dyslexia, separated from other SpLD, for the purposes of its inclusion in the ATDI application be assessed, to the extent that this contributes to giving a better response to students with dyslexia (Procurador del Común de Castilla - León, 2018)".

4.3.2. IN ITALY

Italy has been one of the first countries in the world to promote the inclusion of students with disability into mainstream educational provisions (Agnelli Foundation, 2011). According to the Constitution, the Italian Republic guarantees school for all (Art. 34) and requires that the mandatory duty of solidarity be fulfilled (Art. 2). Moreover, it is the "duty of the Republic to remove any obstacles constraining the freedom and equality of citizens in order to ensure the full development of the human person' (Art. 3)"¹.

The education system in Italy is inclusive, since all children, with any type of disability attend school in regular classes. The legislative process that led the Italian school towards inclusion for individuals with disabilities begun in the 70s of the last century. This integration process was started with the Law n.118 of the 1971, which established that even the students with disabilities must fulfil the compulsory education in the common schools, with the exception of "individuals with severe intellectual disabilities or with physical disabilities so severe to impede and/or make difficult learning in normal classrooms" (Art. 28). In 1977, the Law n.517 created a clearer and more detailed picture with regards to the integration of students with disability into the compulsory schooling system; it established that all students with disabilities had to be placed in the common school. This Law abolished special classes and provided for the figure of the support teacher (Ianes, Zambotti & Demo, 2013).

A very important Law in this area is certainly the Law n. 104/1992 concerning the assistance, social integration and the rights of individuals with disabilities, that tried to meet the complex needs of these people at the different stages of their life more systematically and exhaustively (Maggiolini & Molteni,

¹ European Agency for Special Needs and Inclusive Education.

2013). This Law not only deals with the school situation but also guarantees full respect for the human dignity and the rights of freedom and autonomy of the individuals with disability and promotes their full integration into the family, school, work and society. Regarding the scholastic experience, this Law (Art.12, Art.13) establishes that the right to education cannot be hindered by either learning difficulties or any other kind of problem such as poverty, low social/cultural level, lack of parent's care, or ethnicity. This Law also established the rights of people with disabilities to attend all mainstream classes of academic institutions, including universities and higher education (Maggiolini & Molteni, 2013; Ianes, Zambotti & Demo, 2013). The Law also provides, in order to encourage greater scholastic integration, a particular attention towards pupils with disabilities which is expressed in an individualized training course, in which more institutional subjects participate, also through the realization of important documents such as the: (a) Medical Sanitary Certification; (b) Functional Diagnosis (DF in the Italian acronym) and Functional Dynamic Profile (PDF in the Italian acronym), today replaced by a single document called Functioning Profile (PF in Italian acronym, Legislative Decree n. 66/2017) released according to the criteria of the bio-psycho-social model of the International Classification of Functioning (ICF, WHO, 2001); (c) Personalized Education Plan (PEI in the Italian acronym), that describes the interventions planned for pupils/ students with disabilities in a given period.

Along this path of inclusion of students with disabilities, in October 8th 2010, the Law n. 170 on SpLD was approved. This Law can be considered as an expansion of the Law 104/1992, and it aims at ensuring the right to education, promoting academic success and reducing relational difficulties of students with SpLD (Feola, et al., 2015).

This Law recognizes dyslexia, dysgraphia, dysorthography and dyscalculia as SpLD, which occur in the presence of adequate cognitive abilities, in the absence of neurological pathologies and sensory deficits, but can constitute an important limitation for some activities of daily life (Art. 1, Law 170 of the 2010). The Law 170/2010 was the first specific regulatory intervention in Italy on SpLD, indeed this Law ensures that students with SpLD have the right to avail of "specific compensatory and dispensatory measures of didactic flexibility during the course

of education and training and in university studies" (Art. 5). This Law "[...]– which states that pupils with learning disorders do not need special teachers, but rather a new way of teaching, depending on their way of learning – promotes a change in perspective. The aim is to shift the focus from a clinical to a pedagogical view, by empowering all subjects involved in the educational process" (European Agency for Special Needs and Inclusive Education)¹.

Specifically, the Law provides that, for students with SpLD, the educational institutions provide Art. 5, Law 170 of the 2010):

- The use of individualized and personalized teaching, with effective and flexible forms of school work that also take into account peculiar characteristics of the individuals, such as bilingualism, adopting an appropriate methodology and educational strategy.
- The introduction of compensatory tools, including alternative means of learning and information technologies, as well as dispensing measures².
- For the teaching of foreign languages, the use of compensatory tools that promote verbal communication and ensure a gradual learning, providing also, when appropriate, the possibility of exemption.

The subsequent Ministerial Decree n. 5669 of 2011 regulated the training of teachers on the subject of SpLD and on the educational and didactic support measures useful to support the correct teaching/learning process, as well as the forms of verification and evaluation ensuring the right to study of students with a diagnosis of SpLD. When the Decree was approved, it was accompanied by guidelines for the right of education of students with SpLD, which defined the duties and functions of each of the parties involved in assisting students with SpLD (Family, School and Health Services). Based on these guidelines, teachers are required to identify any potential cases of a learning disorder. Once a SpLD is suspected, targeted didactic recovery activities are implemented; if difficulties

¹ <https://www.european-agency.org/country-information/italy/systems-of-support-and-specialist-provision>

² Compensatory instruments are educational and technological tools that replace or facilitate the performance required in the deficient ability. Dispensary measures are interventions that allow the pupil or student not to perform certain services that, due to the disorder, are particularly difficult and that do not improve learning (National Guidelines, 2011).

persist, the student's family is notified. The family may then request a psycho-diagnostic evaluation in order to receive a diagnosis and a certification of SpLD, which must then be submitted to the school. Once the certification is received, the school can implement a Personalized Didactic Plan and the necessary dispensatory and compensatory measures (Guidelines of July 12, 2011).

The Personalized Didactic Plan (PDP, in the Italian acronym) is an official document prepared by the teachers who receive a student's diagnosis of DSA. It is fundamental to guarantee the learning and scholastic success of students with SpLD, as it indicates the most suitable teaching strategies to ensure the best performance by each student. The Personalized Didactic Plan, which must be prepared within two months from the beginning of each school year by the class teachers, is a contract between the school and the family, which must be signed by both these parts, to come into effect. The Personalized Didactic Plan is drawn up at the beginning of each school year, but it could also be compiled during the school year in case of a new diagnosis. It is a flexible and dynamic document: it can be checked and updated by teachers during the school year.

Following the promulgation of the Law n. 170/2010, the Italian Universities have activated various services for students with SpLD. Within each University there is a Disability and SpLD Service (SDDA in Italian acronym), initially established for students with disabilities by Law n. 17 of 28 January 1999. The Disability and SpLD Service guarantees the full inclusion in the university life of students with disabilities and SpLD, for which specific facilities are provided, including: forms of specialized tutoring, technological and didactic aids, compensatory tools and dispensatory measures (Montesano & Valenti, 2020).

In December, 2012, a Ministerial Directive from the Italian Ministry of Education further broadened the categories of students able to receive individualized lesson plans, marking the first official recognition of SEN in Italy (MIUR, 2012). This macro-category covers students with specific difficulties (ADHD, speech disorders, etc.), but also any students with difficulty at school, caused by social, cultural, behavioral or psychological issues. The difficulties are identified and assessed by teachers, and a clinical diagnosis is not necessary (Ianes, Zambotti, & Demo, 2013). In the Directive the macro-category of the SEN

is described as follows: "The area of school disadvantage is much broader than that which can be explicitly referred to the presence of deficits. In every class there are students who require special attention for a variety of reasons: social and cultural disadvantage, SpLD and/or specific developmental disorders, difficulties arising from not knowing the Italian culture and language because they belong to different cultures. [...] This area of school disadvantage, which includes different problems, is referred to as the area of Special Educational Needs". This macro-category includes three major sub-categories:

- Students with clinical certification of disability.
- Students with specific developmental disorders: SpLD, ADHD, Specific Language Disorder, Developmental Coordination Disorder or other severe problems that can compromise the school path.
- Students with Socio-economic, linguistic and cultural disadvantage.

Subsequently a Ministerial Circular, produced in March 2013, asks the class teachers to elaborate and put into effect a Personalized Didactic Plan (as for SpLD students) for students with SEN, adapting teaching and assessment to the specific characteristics of the SEN students (MIUR, 2013).

Students with Specific Learning Difficulties in Italy

According to Minister of Education's latest report (MI-DGSIS, 2020), during 2018/2019 (Figure 18) school year, in the Italian primary and secondary schools' pupils with certified SpLD were 298.114, accounting for 4,9% of the school population (6.007.483).

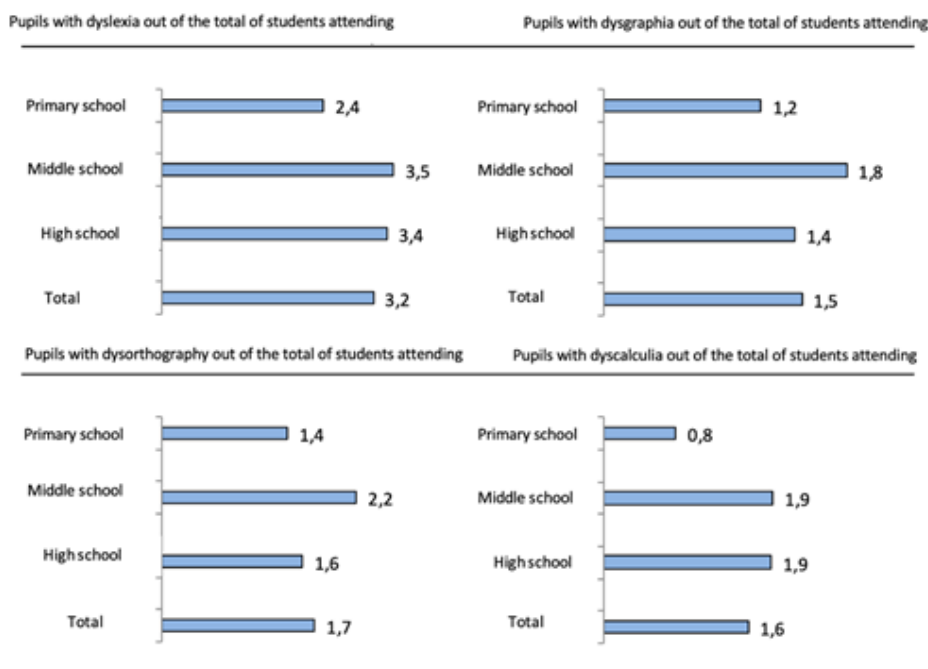
Figure 18. Pupils with SpLD and total pupils per school order.

School order	Pupils with SLD	Total pupils	% of pupils with SLD
Primary school (III-IV-V year)	52.105	1.661.770	3,1%
Middle school	102.400	1.725.037	5,9%
High school	143.609	2.690.676	5,3%
Total	298.114	6.077.483	4,9%

Source: MI – DGSIS - Ufficio Gestione Patrimonio informativo e Statistica 2020.

Analysing in detail about the types of disorder, in the 2018/2019 school year, 187.693 pupils presented with dyslexia, 87.859 dysgraphia, 101.744 dysorthography and 96.081 dyscalculia. Pupils with dyslexia represent 3,2% of the total number of pupils attending primary and secondary schools, pupils with dysgraphia 1,5%, pupils with dysorthography 1,7% and pupils with dyscalculia 1,6%. In detail, it is observed that pupils with dyslexia are 2,4% of the total number of pupils in primary schools, 3,5% in middle school and in 3,4% in high school. Pupils with dysgraphia are 1,2% of the number of pupils attending in primary school, 1,8% in middle school and 1,4% in high school. Pupils with dysorthography are 1,4% of all pupils in primary school, 2,2% in middle school and 1,6% in high school. Finally, in primary school, pupils with dyscalculia are 0,8% and 1,9% in middle and high school (Figure 19).

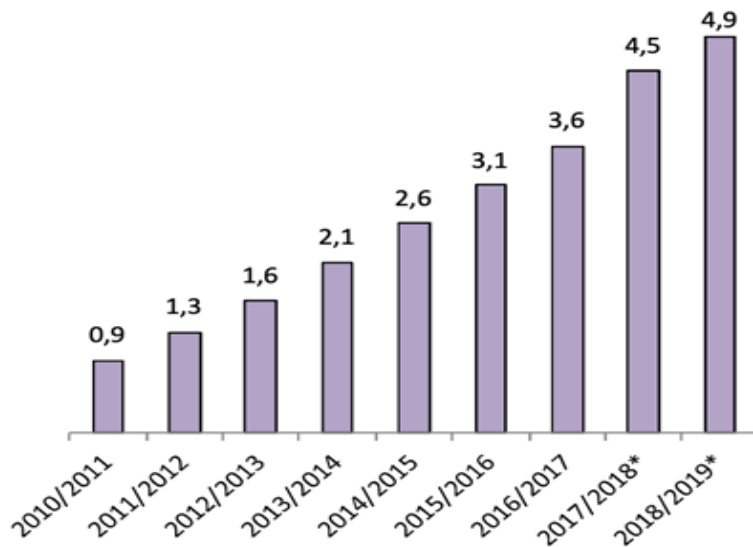
Figure 19. Types of Specific Learning Disabilities by school order



Source: MI – DGSIS - Ufficio Gestione Patrimonio informativo e Statistica 2020.

Over the years there has been an increase in the number of diagnoses of specific learning disorders in Italy. Taking into consideration the last 9 years (Figure 20), the ministerial data show how the number of pupils with SLpD attending primary, middle and high school has gone from 0,9% of the 2010/2011 school year to 4,9% of the 2018/2019 school year.

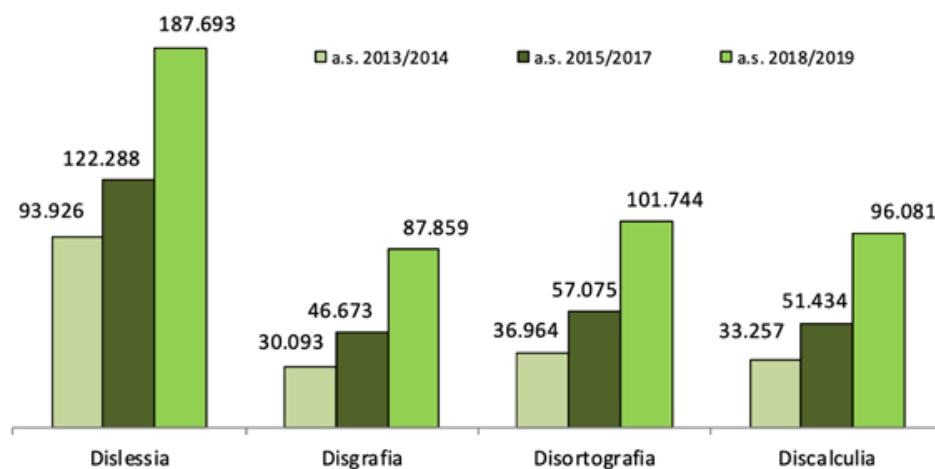
Figure 20. Increase of students with a diagnosed SpLD of the 2010-2011 school year to 2018-2019 school year



Source: MI – DGSIS - Ufficio Gestione Patrimonio informativo e Statistica 2020.

In detail, in the past five years, the certifications of dyslexia went from about 94.000 to almost 188.000 thousand, marking a growth rate of 99,8%, the certifications of dysgraphia from 30 to 88.000 thousand, with a growth of 192%. The number of pupils with dysorthography also increased considerably, passing from about 37 to 102 thousand (+ 175,3%) and pupils with dyscalculia from 33 to 96 thousand (+ 189%) (Figure 21).

Figure 21. Pupils with a diagnosed SpLD of the 2013-2014 school year to of the 2018-2019 school year



Source: MI – DGSIS - Ufficio Gestione Patrimonio informativo e Statistica 2020.

4.3.3.IN ROMANIA

According to Law 1/2011 of 5 January 2011, Law on National Education.

Art. 2 (4) The State ensures equal rights of access to all levels and forms of pre-university and higher education, as well as to lifelong learning, without any form of discrimination

Art. 12 (6) The State guarantees the right to education of all persons with special educational requirements. Special and specially integrated education are part of the national system of pre-university education.

Art. 48 (1) Special and specially integrated education, organized for people with special educational requirements or other types of educational requirements, established by order of the Minister of Education, Research, Youth and Sport, is carried out for all levels of education, differentiated according to the type and degree of deficiency.

Because of the misconception about an equality between SEN and disability, and the misunderstanding of the specificity of the SpLD learning disorders that exclude any cognitive deficiency, it was necessary to enter the law of Education N^o 1 of some paragraph (cf. Law 6/2016) specifying the equal right to education for persons with dyslexia, as well as the fact that they cannot be geared towards special schools but follow the mass education by applying appropriate pedagogical method.

Law 6/2016 issued by The Romanian Parliament, recognizing equal rights for dyslexia pupils to appropriate education has been initiated under the pressure of Dyslexia associations in Romania, and supported at Parliament level. The law no. 6 has been followed by the methodology and guidelines as.

Order of Ministry of Education- OMEN 3124/2017 - Methodology for supporting pupils with specific learning disorders TSI.

The support methodology clarifies and makes the necessary distinction between general learning difficulties that can occur from different reasons and SpLD, defined as Art. 5:

1. Learning disorders, hereinafter referred to as SpLD (TSI= SpLD) designate a heterogeneous group of disorders affecting the typical process of acquisition of school skills (reading, writing and mathematical expression): Dyslexia, dysgraphia (including dis-spelling), Dyscalculia. This is not a consequence of the lack of learning opportunities or lack of motivation for learning, it is not the result of an intellectual disability, a liminary intellect, sensory deficiency (e.g., auditory, visual, motor), disorders, affective and emotional of a psychiatric nature, other disorders as (neuro) development (eg, TSA-autistic spectrum disorders, ADHD-attention deficit disorder and hyperactivity) and is not caused by any form of brain trauma or malady. Dyslexia, dysgraphia and developmental Dyscalculia may appear isolated or may be associated. They are a disorder of biological origin, not a consequence of the absence of opportunities...
2. Dyslexia is a specific disorder of reading skills (in terms of correctness, fluency, comprehension), which are not developed at the level expected by reporting to the level of intellectual development, the level of schooling and the age of the person.
3. Dysgraphia and dysortography comprise all forms of disturbances of the typical process of acquisition of written expression (errors in letters, syntactic errors and punctuation errors, graphical organization of paragraphs).
4. Dyscalculia is a specific learning disorder that is expressed by disturbances of the typical process of acquisition of mathematical skills (numerical sense, memorize of the assembly board and multiplication, correct or fluent calculation, mathematical reasoning)".

According to OMEN 3124/2017 students with dyslexia and other Specific Learning Disorder benefit from compensation tools and dispensation measures suitable for the type and degree of severity of the SpLD, their main requirement being related to the adaptation of the methods of learning and school evaluation and not of general adaptation, as in the case of requirements of other nature. In order to ensure the equal chances during the national exams for students with SpLD, the Ministry of Education published special adapting methods according to each type of SEN (including SpLD) as.

The procedure 26651/ 14.02.2019/20/21 for equalizing the chances for students with vision impairments, hearing impairments, autistic spectrum disorder, SpLD, that sustain national exams: national evaluation and maturity - session 2019 - issued by the Ministry of National Education.

4.3.3. IN PORTUGAL

The Constitution of the Portuguese Republic of 25 April 1976 recognizes the right to education and equal opportunities as fundamental rights of all citizens. Article 71 of the Portuguese Constitution also states that "Citizens with physical or mental disabilities fully enjoy the rights and are subject to the duties contemplated in the Constitution [...] The State undertakes to implement a national prevention and treatment policy, rehabilitation and integration of citizens with disabilities and support for their families [...].

On 14 October 1986, Law No. 46/1986 was enacted, entitled Fundamental Law of the Educational System, Lei de Bases do Sistema Educativo (LBSE), which defined Special Education as a component of the Portuguese educational system (Art. 21) (European Agency for Special Needs and Inclusive Education, 2021).

Including pupils with SEN in the mainstream schooling as an educational strategy was enshrined in Law 9/1989, 2 May on Prevention and the Rehabilitation and Integration of Persons with Disabilities.

In 1991, Decree Law No. 319/1991 called for mainstream schools to take greater responsibility for the problems of learners with disabilities or learning difficulties. It also opened schools up to pupils with SEN ('schools for all') and provided a set of measures, according to the principle that the education of pupils with SEN must be carried out in the least restrictive environment possible. This Decree Law, in addition to regulating the attendance of students with disabilities in mainstream education, proposed some significant changes, such as:

- replace the term "deficiência" with Special Educational Needs (in Portuguese Necessidades Educativas Especiais - NEE);
- to promote the participation of the family in the educational process;
- provide an individualised educational planning for pupils with SEN;

- draw up an Individual Educational Plan, containing all the information on the student's characteristics and potential, and a teaching programme, where objectives to be achieved and methodologies to be adopted are defined.

On 7 January 2008, the Portuguese State issued Decree-Law 3/2008, which explicitly confirmed that special education "is aimed at all children and girls with significant limitations in terms of activity and participation in one or more areas of life resulting from structural or functional changes leading to difficulties in terms of communication, learning, mobility, interpersonal relations and social participation" This Decree Law defined the specialised support provided in state, private and co-operative pre-primary, compulsory and secondary education, in order to create the conditions to adjust the educational process to the special educational needs of students with significant limitations in activity and participation in one or more areas of life.

In 2018, new legislation on inclusive education came into force, setting out "the principles and standards that guarantee inclusion, as a process that aims to respond to the diversity of needs and potential of each individual student" (Art.1). The Law abandons 'categorisation' system for learners, including the category of Special Educational Needs. The new Decree-Law moves away from the notion that it is necessary to categorise to intervene, rather supporting the idea that all students can achieve a profile of competencies and skills at the end of their compulsory education career, even if they follow different learning paths (Alves et al., 2020).

The methodological options underlying this Decree-Law are based on universal design for learning and a multilevel approach to access the curriculum. The multilevel approach encompasses the implementation of three types of measures, identified in the legislation as (Alves et al., 2020):

- Universal measures: correspond to the educational responses that the school provides for all students, with the aim of promoting participation and improving learning, such as pedagogical differentiation, curriculum adjustments, curricular enrichment. These measures are provided for all students, including those who need selective or additional measures.

- Selective measures: to address deficiencies in universal measures, such as differentiated curricular pathways, non-major curriculum adaptations, psycho-pedagogical support.
- Additional measures: these are envisaged in the presence of serious and persistent difficulties and when the selective and universal measures are not sufficient, such as major curriculum adaptations, individual transition plan, development of personal and social autonomy skills.

5. IDENTIFICATION AND ATTENTION TO DIFFICULTIES IN READING

Despite the educational training that students receive in the classroom, some students have reading difficulties. Some find it difficult to master the decoding processes, others the understanding of oral language, others the complex cognitive processes of text comprehension and others find difficulties in several of these aspects.

But how does the teacher identify that these students have difficulties? What process is followed from the moment the teacher identifies it, until the case is assessed and an intervention is implemented?

In this section, we will first describe the two current models for the identification and care of SpLD and then we will analyze how this identification is in the countries participating in this study: Spain, Italy and Romania.

5.1 FROM THE DISCREPANCY-BASED MODEL TO THE INTERVENTION-BASED MODEL

Currently there are two models to identify / diagnose dyslexia, the model based on the discrepancy between intellectual capacity and reading behavior, in which it is necessary to wait for a gap between the two to make the diagnosis; and the model based on the response to the intervention in which it is intervened early and is diagnosed when the reader seems to resist learning.

From the discrepancy model, one of the criteria for identifying SpLD in reading is that there is a severe discrepancy between what the person is capable of learning given their cognitive ability and what they actually do: poor reading performance (Kirk, & Bateman 1962; and assumed in the DSM IV diagnostic manuals, 1994). The problem that arose after this detection criterion is that what was called severe discrepancy was not well operationalized, which led to many versions of the diagnosis in research and in school practice (Lyon, et al. 2001). This condition is considered to be fulfilled in either of these two cases:

- From a clinical point of view, when the gap between intelligence and reading behavior is greater than 1.5 or 2 standard deviations, depending

on whether the criterion is more or less restrictive. But, it is not easy to find valid reading tests that make it possible to use the most recommended formula to find the discrepancy (Goikoetxea, 2012). On other occasions, a student is considered to have a reading delay when, according to the scales of the test used, the reader is located in a percentile lower than 25 (Siegel, 1999).

- From the educational point of view, it is considered that there is a significant discrepancy when the student's reading level is two years below what corresponds to them by chronological age and, this happens, without any intellectual or sensorimotor deficit to justify it. From this perspective, dyslexia is not diagnosed before the 3rd grade of primary education for two reasons: because it is in the 3rd grade that the use of the indirect route should be automated; and because the failures made by people with dyslexia and without dyslexia during the first years of learning (1st and 2nd) are very similar. Knowing that the learning pace of some students is slower, we do not want to label in advance so as not to generate anxiety for the families and those affected themselves (Cuetos, et al., 2015).

The desirable thing would be to identify the group of students at risk of having reading difficulties early and to initiate an intervention early. This is what the response to intervention (RTI) model raises, initially proposed by Vaughn and Fuchs (2003) in the US and which has already been incorporated into DSM V (APA, 2014).

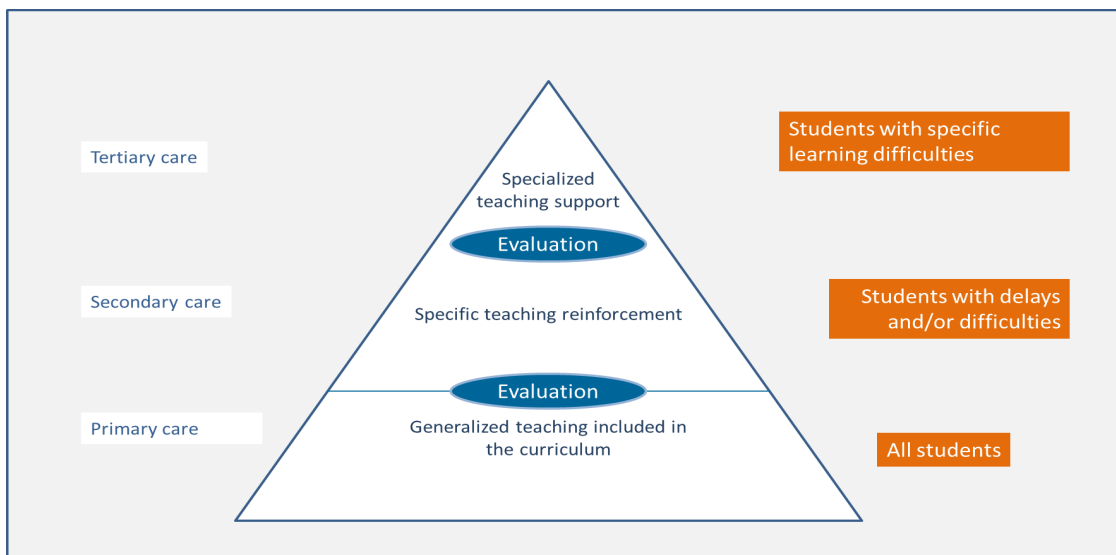
This new model implies three actions: early evaluation, intervention and monitoring of progress and, although it can be implemented in many ways, one of the most accepted forms of organization includes three levels of intervention (Figure 22).

- In Early Childhood Education we begin to work with all students in the classroom and as a prevention, the main skills that have been scientifically proven to be effective and are at the basis of reading success (intervention level 1). These skills are five: phonological awareness, alphabetic principle (RCG / F), fluency in the evocation of information, vocabulary and comprehension. The last three, fluency, vocabulary and comprehension

are worked on in Early Childhood Education in its oral modality, but as they progress in their learning and, especially in Primary Education, they are also worked on in its written modality (Report of the National Reading Panel, 2000).

- After this teaching, an evaluation of the students is made, precisely in those five skills worked on. Those who show difficulties in the same are considered students at risk of having difficulties in their learning. Again, they intervene with them, but now in a small group and in a more specific way, with the aim of improving these skills (intervention level 2). At this time it is very important to control how each student responds to this intervention, because if the student does not advance in these skills, we could ensure that their difficulties do not derive from a lack of instruction, but rather a specific disorder underlies.
- If despite the instruction it seems that the person does not improve and resists learning, it is the moment in which it is thought that a specific disorder probably exists and is referred to psychopedagogical guidance services (EOEP). Once assessed and, if confirmed, a more individualized and intensive intervention is undertaken with them (intervention level 3).

Figure 22. Model of response to intervention: 3 phases.



Source: Own elaboration, based on Vaughn & Fuchs (2003).

5.2 MODELS AND PROFESSIONALS RESPONSIBLE FOR THEIR IDENTIFICATION AND CARE IN THE PARTICIPATING COUNTRIES

Unlike other students with specific educational support needs who already come to school with a diagnosis; the detection of students with SpLD in reading is usually carried out by the teacher while listening to how they read and / or see what the students write in the classroom. From there, a process of permits, evaluations and interviews in which different educational agents intervene.

Next, the SpLD identification model will be contrasted (that of discrepancy or that based on the intervention) and the protocol that is followed in the different participating countries: Spain, Italy and Romania.

5.1.1 IN SPAIN

In Spain, educational competences are transferred to the Autonomous Communities. There is a General Education Law for the entire territory. But later, the educational administrations of each Community adapt and specify their procedures to their particular reality. In this case at hand, each one includes guidelines for the detection of SpLDs; protocols for its evaluation and plans for educational attention throughout schooling.

Due to this plurality of administrations, in Spain the two models for identifying SpLD in reading coexist, the one based on response to intervention (RTI) and the discrepancy model. However, all the communities are taking firm steps towards the RTI Model.

The action guidelines to identify and serve students with SpLD in reading are similar to those of other SpLD or SESN that exist in schools. These guidelines can be collected in different documents: in the Community's Diversity Attention Plans or at the level of the Educational Center, in its Educational Project, Annual General Programming, in Orientation Plans and Tutorial Action, and even some communities (such as that of Cantabria and Castilla la Mancha) these guidelines are indicated in the Didactic Programming themselves, which favors inclusión (Eurycide, 2012).

The professionals involved in this detection process are: the tutor and the rest of the educational team that teaches the student (music, physical education,

English language ...), the psychopedagogue, the teachers Therapeutic Pedagogy, Hearing and Language Support.

Services, and the social worker.

- The tutor is the most relevant piece and intervenes in many moments of the process. In prevention, when planning the teaching-learning process of reading. In detection, it is the tutor who detects which student has difficulties. In addition, they offer reinforcement when students have a delay in learning and it is more difficult for them to progress in the classroom. They intervene in the evaluation, as it provides information to the psychopedagogue about the student and contrasts with them the notebooks and results of the students' curricular progress. They will also be in charge of implementing the guidelines offered by the counselor in the classroom and is responsible for coordinating the entire teaching team that teaches the student and the first interlocutor in communication with the family.
- The psychopedagogue or counselor plays a very relevant role in detection and especially in evaluation; where they will detect the specific needs of educational support of the students and will indicate orientations. Sometimes they also intervene by promoting prevention programs in schools and providing materials to teachers.
- Support teachers (therapeutic pedagogy, and hearing and language). The hearing and language teacher intervenes, especially, in the plans for the prevention of difficulties with oral language in Early Childhood Education. In Primary Education, they can intervene, together with the teacher of therapeutic pedagogy, in advising tutors on how to offer support within the classroom and complete the teaching work of generalist teachers, inside or outside the classroom. They also both monitor cases.
- Social worker, belonging to the psycho-pedagogical team, values the supports and imbalances that occur within the family context and intervenes to ensure the well-being and educational development of the student.

The way to articulate the different parts of the process of identification of students with SpLD in reading and the form of participation of the different professionals when the discrepancy model is maintained is as follows:

Inside the classroom, while the students do reading and writing practices, the teachers observe that there are students who have a delay in learning to read and write. In these cases, the first thing that legal tutors do / must do is offer reinforcement to these students. That is, doing extra activities with these students to help them overcome their difficulties.

If it does not progress, the referral report is made. The referral report is a document by which the Psychopedagogical Team is requested to evaluate a student. This report is completed, first, describing what difficulties (in this case reading) are observed in the student. Afterwards, the activities the teacher has undertaken to reinforce this learning must be specified.

If the psychopedagogue of the team considers that an evaluation of the student is necessary, they first request the consent of the parents and once they give their permission, they hold an interview with the family to collect data on the student and find out the support they can provide in order to intervene. They also contact the teacher-tutor to obtain more information about the student (listen to the teacher's impressions and see the student's notebooks). The psychopedagogue also observes the student in different contexts: in class, in the yard, ... And it assesses the student's reading and writing abilities and, often also, their cognitive and linguistic abilities.

Some of the tests that are usually used to assess their literacy skills are: The Test of Analysis of Literacy (TALE) by Cervera and Toro (2000); and the different evaluation batteries prepared by Cuetos et al.: PROLEC-R (2014) for reading skills in Primary Education; the PROLEC-SE-R (2016) to evaluate reading in Secondary; and the PROESC (2018) to assess writing in students from 8 to 15 years old. Other tests assess oral language: Clinical Evaluation of the Fundamentals of Language (CELF-5) by Wiig, Semel and Secord (2018) to diagnose language and communication disorders in people aged 5 to 15 years and 11 months; The Revised Objective and Criterial Language Battery (BLOC-R) by Puyuelo, Rondal and Wiig (2007), which assesses semantics, morphology, syntax

and pragmatics from 5 to 14 years old; or the Induced Phonological Registry of Monfort and Juárez (2001) which assesses phonology from 3 to 7 years. To assess cognitive ability, the WECHSLER Intelligence Scale is used, specifically the WISC-5 (2015) for Primary Education.

With all the information provided by the family and the teachers, and with the data obtained in the different evaluation tests, the psychopedagogical report is made. It specifies, on the one hand, what the strengths of this student are, what their specific needs or educational support are, what support they need and their intensity. In addition, a series of orientations is offered aimed at both the family, the tutor and the specialist teacher (therapeutic pedagogy and hearing and language).

Afterwards, the educational psychologist explains these results to teachers and families.

When they meet with the teaching team, in addition to reporting the most salient data, you agree on how to continue coordinating and monitoring. Depending on the dynamics of the centers, support can be received inside the classroom, outside and in both ways. However, it is more and more promoted that one part of the intervention is within the classroom and the other, a more specific support in the instrumental areas, outside of school hours.

When they meet with the family, in addition to transmitting the educational capabilities and needs of the child; they also address the information needed by the families about SpLDs: what it means to have dyslexia; how reading skills can be improved, but not "cured"; how important it is to enhance their capabilities; how the school plans to respond to the educational needs and how the family can help from home.

However, despite all these measures, some difficulties still arise throughout this process. Sometimes, because not all students with SpLD are detected throughout their school stay or because it is identified very late. Sometimes, because the intervention is carried out very late and it does not always meet all the reading, learning, emotional and / or social needs that they have

For all these reasons, most educational administrations are moving towards a prevention model based on response to response to intervention (RTI).

In this sense, many communities have published plans or guides to develop prevention and early detection programs, such as: Extremadura, the Basque Country, Andalucia, Madrid ...

In addition, some communities have already begun to apply early detection tests for these difficulties. Thus, in the Community of Asturias, health services carry out a screening at 4 years applying the Test for the early detection of difficulties in learning to read and write by Cuetos et al. (2015), which assesses: phoneme discrimination, syllable segmentation, phoneme identification, pseudoword repetition, digit repetition and fluency (animal names); and in the community of Castilla - León, Domínguez, Alegría, Carrillo and Soriano's (2013) Analytical Assessment Battery of Written Language (PEALE) is being tested in an experimental way in Primary Education (6 years), which assesses efficiency reader, keywords, syntactic ability, morphological ability, vocabulary, spelling decision, syllable metaphonology, phoneme, tonic accent. Proof that, soon it will be applied in a generalized way.

Other communities that also begin to detect the possibility of risk in learning to read early, have already planned the specific intervention that must be carried out later. This is the case of the Canary Islands Community. It has the Test Indicators of Progress in Learning to Read (IPAL) by Jiménez and Gutiérrez (2017) to detect students at risk of difficulty in reading from 5 to 8 years old (3rd of EI, 1st EP and 2nd EP). The process that follows has these three phases: (a) they perform a screening, very early, between 5-7 years (3rd IE and / or 2nd PE), to identify the students who are at high risk, (b) with the group which is at risk, an individualized, intensive and long-term intervention program is implemented, (c) their progress is monitored every trimester to evaluate how they are progressing. If the students do not respond adequately to the intervention, that is when they are referred to the Psychopedagogical Team to assess whether there really is SpLD in reading. If so, more specialized actions are taken. The cycle coordinators are in charge of this detection work, as well as the psychopedagogical coordination commission.

But the most advanced in the Model RTI is found in the province of Malaga in the Community of Andalusia. They begin by teaching early and to all students

the bases that facilitate the subsequent learning of reading and, then pass screening tests to detect students who present difficulties in their learning and undertake a more intensive intervention with them. In this province, the University of Malaga has created the LEEDUCA platform and has produced different materials. To work on the development of the 5 skills that predict reading success in the ordinary classroom, it has developed a rigorous and very well sequenced program aimed at Early Childhood Education students (from 3 to 5 years old) (PRELEO program). To facilitate the learning of the written language for students aged 6 and 7 (LETREANDO program). In addition, it has universal screening tests to detect between 4 to 7 years old, which students are at risk of developing reading difficulties and with batteries of individual evaluation of cognitive and linguistic abilities and skills (for students aged 4 to 8 years) to do monitoring.

In summary:

It is urgent and essential that all communities apply the identification model based on response to intervention (RTI). This entails:

- The incorporation of prevention activities (or primary intervention) in infant education classroom programming.
- Early and generalized screenings for an early identification of students at risk of presenting SpLD in reading. From this, several options can be followed:
 - In 2nd year of Early Childhood Education, the Early Detection Test for Reading and Writing Learning Difficulties can be applied (Cuetos et al., 2015).
 - From the 3rd year of Early Childhood Education, the IPAL test (Giménez & Gutiérrez, 2017); those of the LEEDUCA platform can be implemented, or, at the latest, a screening test in 1st year of Primary Education, the PEALE tests (Domínguez et al., 2013).
- Do not stop detecting and attending to any student with SpLD in reading.
- The training of teachers and psychopedagogues in the Identification Model based on Intervention.

5.1.2.IN ITALY

In Italy, the Law 170/2010 has recognized dyslexia, dysgraphia, dysorthography and dyscalculia as Specific Learning Disorders (SpLD). This law was followed by other fundamental documents.

- The Ministerial Decree and Guidelines for the right to study of pupils and students with SpLD of the July 12nd, 2011.
- The Agreement between State and regions concerning procedures for diagnosis and certification of the July 25th, 2012.
- The Inter-Ministerial Ministry of Education, Universities and Research and Ministry of Health Decree concerning early detection in schools, of the April 17th, 2013.

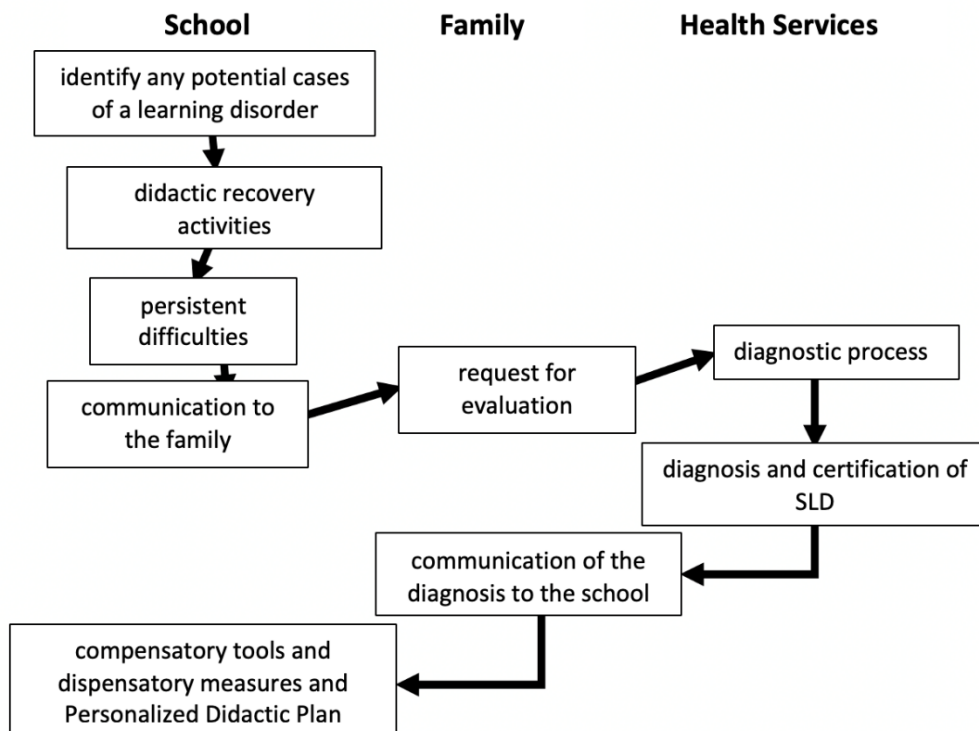
In these documents the diagnostic process is also regulated. These disorders diagnoses should be made by a public or a specialists or accredited facilities healthcare setting¹, while schools are required to actively promote the early detection of potential SpLD by notifying the families. Specifically, these documents define the duties and functions of each of the parties involved in assisting students with SpLDs (Family, School and Health Services). The legislation therefore requires that teachers are expected to detect any potential case of learning disorders. Once a SpLD is suspected, the school puts in place targeted didactic recovery activities and, in case of persistent difficulties, the family of the student is notified. The family should then request a specialist assessment (either at a national health service center or at a private accredited facility), to provide a diagnosis and the associated certification, which must be presented to the school by the family. Once the diagnosis and certification are received, the school can implement a Personalized Didactic Plan and the necessary dispensational and compensatory measures (Figure 23) (Feola et al., 2013).

On 25th July 2012, the Permanent Conference for Relations between the State, the Regions and the Autonomous Provinces of Trento and Bolzano defined the criteria for carrying out diagnostic activities and the requirements for the identification of specialist facilities accredited to diagnose and certificate the SpLD. With regard to the identification of facilities authorized to release diagnoses, the following minimum requirements were established: (a) documented experience in SpLD diagnostics; (b) availability of a multidisciplinary team consisting of child

¹ These are professionals or private structures that can release certification of SpLD and to do so they must meet some requirements.

neuropsychiatrists, psychologists and speech therapists, who may be supplemented by other health professionals; (c) to comply with the Clinical Practice Recommendations for SpLD (2007-2009), their relevant updates, and with the Consensus Conference of the National Institute of Health (ISS 2011).

Figure 23. Schematic diagram of the phases provided for by Law n. 170/2010 for diagnosis and certification of SpLD



Source: Guidelines for the right to study of pupils and students with SpLD, attached of the Ministerial Decree of the July 12nd, 2011.

In Italy, in fact, the ICD-10 coding system is used for the diagnosis of SpLD, moreover, the diagnosis must also take into account the documents of the Consensus Conference and the Law 170/2010 (Cornoldi & Tressoldi, 2014).

The diagnostic evaluation for SpLD include the assessment of the cognitive abilities (for example through the WISC-IV, 2012) and the assessment of the following parameters (Cappa & Giulivi, 2012):

- For dyslexia: reading speed (in tests of reading of words, non-words, text), accuracy of reading (for words, non-words, text). The standardized tools mainly used to evaluate these skills in primary

school are the MT test for speed and accuracy in reading (Cornoldi & Carretti, 2016) and the Battery for the assessment of Developmental Reading and Spelling Disorders (DDE-2 in the Italian acronym, Sartori, Job, & Tressoldi, 1995; 2007).

- For dysortography: accuracy in orthography (in tests of dictation of words, non- words, and text or composition of sentences or text). The standardized tool mainly used to evaluate these skills in primary school are the Battery for the assessment of Developmental Reading and Spelling Disorders (DDE-2 in the Italian acronym Sartori, Job & Tressoldi, 1995) and the Battery for the Assessment of Writing and Spelling Proficiency (BVSCO-2 in the Italian acronym, Tressoldi, Cornoldi, & Re, 2013).
- For dysgraphia: fluency (writing speed) and quality of the graphic sign.
- For dyscalculia: speed and correctness of the components of numeric cognition, executive procedures, and calculation abilities. The standardized tools mainly used to evaluate these skills in primary school are the AC-MT test (Cornoldi, Mammarella & Caviola, 2020) and the BDE-2 test (Biancardi, Bachmann, & Nicoletti, 2016).

The diagnostic evaluation must also exclude the presence of neurological, cognitive or sensorial pathologies, as well as other psycho-pathological disorders. The tests used to evaluate these abilities must be standardized and validated. Regarding age, the diagnosis of dyslexia can be made at the end of the second grade of primary school.

Moreover, according to the legislation, the diagnosis and certification of SpLD must include: (a) quotation of the relevant diagnostic code (currently, all those included in the F81 category: Specific developmental disorders of scholastic skills, of the ICD-10) and the specific subcategory of the SpLD in question (reading and/or writing and/or mathematics); (b) information needed to draw up a personalized education program based on the specific difficulties of the student.

5.1.3. IN ROMANIA

Diagnosis procedure varies according to the type of SpLD with reference to ICD-10 and DSM-V.

Order 1985/1305/5805-2016 specifies which steps to follow for obtaining the certificate indicating the special educational needs after completing all the diagnostic stages.

Unfortunately, the provisions of the mentioned Order, as well as the National Education Law, retain much of the old structure of the Romanian special education system, in which it often overlaps the label of disability (as handicap) over any form of SEN.

For this reason and for a better school orientation of pupils with SpLD in accordance with their specific needs, under the conditions of absence of sensorial or cognitive deficits, the order of Ministry 3124/2017, brings the necessary particulars, based on scientific arguments, in accordance with the provisions of modern legislation of other countries.

Order 3124/2017 provided guidance regarding the assessment of every different type and level of difficulty. Diagnosis for Dyslexia recommended starting with second school year, dyscalculia with the third.

As Art. 10, there are three levels of assessment:

- Psychological evaluation-involves the assessment of neuro-cognitive functioning profile (verbal, non-verbal, total), behavioral, emotional and motivational-affective profile, as well as adaptive operational skills. In order to establish differential psycho- diagnosis, specific tests should be carried out to assess attention, memory, sensitive -motor and visual spatial functions, language, phonological processing skills and other cognitive functions involved in the learning process.
- Logopedic assessment (educational psychologist/ speech therapist) – assumes the evaluation of oral language (phonological, lexical-semantic, morphosyntactic and pragmatic side), written language (reading correctness expressed by number and type of errors, reading fluency and comprehension) and writing (graphomotor ,visual-spatial of writing, spelling, punctuation, written error types and frequency), numeration and

calculation (reading and writing numbers, correspondence between number and quantity, numerical sense-non-symbolic quantitative comparisons, correctness and fluency in computing operations, both in the realization of algorithms and in the updating of automated results, use and understanding of mathematical language, mathematical reasoning).

- Medical assessment is carried out, as appropriate, for differential diagnosis: psychiatric and neurological evaluation, ophthalmological evaluation, otorhinolaryngology assessment.

Procedure request psychological evaluation, speech therapy and medical evaluation (for differential diagnosis), and a mandatory formal diagnosis results, with a medical certificate (A5) and clinician psychologists stamped report. These are the mandatory documents for obtaining the SEN certificate and the rights to school support, as resulting from the Order 3124/2017.

Recently appeared in Romania the DDE2 (Dyslexia & Developmental Dysorthography Assessment Battery - 2) that will bring the first specific assessment instrument to be added to the existent tests WISC IV, NEPSY, ASO.

5.1.4. IN PORTUGAL

In Portugal, the diagnosis of dyslexia can only be made after two years of schooling. A thorough evaluation is required to diagnose dyslexia, which requires the collaboration of multiple professionals, speech therapist, psychologists and doctors.

The assessment includes the student's anamnesis, cognitive and behavioral evaluation and assessment of reading skills. The objective of the evaluation is to know the strengths and weaknesses of the individual, the resources at his disposal, so as to be able to formulate the necessary recommendations. The results obtained in the assessment will serve as the basis for constructing an intervention plan with methodologies and educational strategies adapted to each student, which must be shared between health professionals, families and teacher.

6. PRIMARY INTERVENTION. EDUCATIONAL ATTENTION TO STUDENTS WITH DEA IN READING FROM THE CURRICULUM

The primary intervention in DEA aims to take measures to promote, from the beginning of the teaching / learning process, the best possible reading skills and prevent difficulties from arising. In addition, although before it was the support teachers who were the main responsible for attention to diversity, now we know that it is the tutor who must be responsible for the progress of their entire classroom.

For this reason, the curricula it self should include guides or decision-making on what skills to teach students to promote, in all, the maximum development of their reading possibilities. The goal is that no child is left behind for reading reasons.

Next, the skills that the curricula should include to ensure the reading success of their students are indicated and later, what is proposed in the general educational laws of the different countries will be analyzed to identify if something should be improved in them.

6.1. THE FIVE SKILLS THAT PREDICT READING SUCCESS

In 2000, the United States National Reading Panel published a report entitled Teaching Children to Read (NICHD, 2000) in order to identify which were the skills that scientific evidence had proven essential to achieve reading success. The knowledge of these skills should serve for the different educational administrations to take measures on what to teach in school to prevent and address AEDs in reading. This committee of experts concluded that there were five skills that had to be worked on: phonological awareness, alphabetic principle, fluency, vocabulary and comprehension.

Next, we will first define what these skills that predict reading success consist of and some intervention guidelines that are already outlined in the NICHD report (2000). In addition, and in a complementary way, other guidelines based on scientific evidence will be discussed.

Instruction in Phonological Awareness (phonemic awareness).

Phonological awareness is the ability to isolate, identify, and accurately manipulate the smallest units of sounds (the phonemes) that make up the spoken words of a language. This ability is assessed through activities such as: isolating the sounds of words, identifying a common sound between two words, finding words that rhyme, assembling phonemes to build a word, segmenting the word into the phonemes that make it up, removing sounds from one word to build another ... Scientific evidence indicates that these types of activities favor the acquisition of phonemic awareness and facilitate its application to reading and spelling.

According to the NICHD (2000), the development of these skills are a clear predictor of reading advancement during the first school years. This is because, in alphabetic languages, the spellings of the alphabet correspond to these minimum units of sounds (Adams, 1990).

To facilitate progress in phonological awareness, a teaching sequence based on the ease difficulty of different variables that can come into play when planning tasks is proposed.

- The linguistic unit on which it is reflected. Evolutionarily, it is easier to work on phonological awareness with larger linguistic segments than with smaller ones (Domínguez, & Clemente, 1993). This makes it easier to identify rhymes, then syllables, and then phonemes. Rhyme is the simplest unit because it requires less conscious segmentation (Lundberg, 1978). Only a little help is needed for the segmentation and identification of syllables, since it is supported by natural articulatory segments (Mann, 1986). Both rhyme awareness and syllabic awareness can be explicitly taught before the formal teaching of the written language.
- Phonemic awareness operates with abstract segments and is the most difficult. It does not usually appear before the age of 5 and it is worked in parallel with the instruction in the alphabetic principle (Morais et al., 1987).

- The type of task that the student is required to perform also makes the activity difficult. Passive tasks, such as identification tasks, are easier to perform than active tasks, which involve intervention on the word, as it happens, for example, with the manipulative tasks of omission, addition, synthesis ... (Bravo Valdivieso, et al., 2002).

Identification tasks can also be affected by three types of variables: the duration of the sound, the complexity of the syllable where it is included and the place it occupies within the word (Domínguez & Clemente, 1993). Thus, it is easier to identify vowels and consonants that can be lengthened than plosives, which are shorter and cannot be lengthened. It is easier to identify sounds in direct syllables, than in mixed and locked syllables (Content, 1985). Regarding the place of the sound to be identified within the word, it is easier to reflect on sounds that are at the beginning of the word, then at the end, and the most complex thing is when they are in the middle.

In manipulation tasks (add, remove) it is easier to make people reflect when the target linguistic segment is in the final position, then the initial position and, finally, when they are in the middle (Domínguez, & Clemente, 1993).

Instruction in the alphabetic principle (phonics)

Involves learning to match each spelling or set of spellings of the written code with its phonic element. This learning of the alphabetic principle or the application of the rules of grapheme / phoneme correspondence is easier and happens earlier in transparent languages (such as Spanish, Italian, Romanian, Serbo-Croatian, Finnish, Korean), than in opaque languages (Anglo-Saxon) due to the spelling and decoding difficulties of irregular words. That is, when words are pronounced differently to how they are written.

There are analytical methodologies that start from the meaning of the word and then break down the phonic elements that compose it; and synthetic methodologies that start from the application of the grapheme-phoneme correspondence rule to read the word and work on its meanings. Scientific evidence

(NICHD, 2000) indicates that the most effective way to master this alphabetic principle are the methodologies (or the teacher's ways of proceeding) that emphasize the phonological aspects of the code. And, the benefits of this methodology are more important for students with reading difficulties and for those who come from disadvantaged socio-cultural backgrounds.

However, this explicit, intensive and essential training in the phonological aspects of the written language must be made compatible with other teaching-learning proposals, such as offering expert reader models (Fons, 2000) because listening to a text aloud increases the interest to continue reading; involve students in functional contexts and real social practices of literacy (Pérez, & Zayas, 2008) to know the function of literacy and the activity has a meaning for the reader. For this, different types of text and different models or ways of interacting must be offered with it (Ferreiro, 2001): be it journalistic material, a recipe, a map, a graphic, a poster, the story or the label of a supermarket product ...

What is more, Reading should be worked together with the other three linguistic skills: speaking, listening and writing, because some skills support each other and provide feedback. Namely:

- Speak before reading the text to hypothesize about the information in it and create a framework to understand the information that is written there. That is, to prepare the student to enter into a dialogue with the text.
- After reading, speaking and listening to the meanings and interpretations of the text that the teacher and other classmates can make. That is, talking about what has been learned with the text, asking about what has not yet been well understood, causing them to make inferences and relate information, or to talk about the values that underlie the content read.
- Read to research, share, and then apply to new realities or tasks. That is, read to learn to do.
- Speak and listen to the text written by other classmates to enjoy it or to correct and improve it.

Reading fluency instruction.

Reading fluency is the ability to read with precision, speed and adequate prosody (volume, rhythm, intonation during phrasing, pauses). It depends on the consolidation of the RCG / F, the automatic recognition of the word and the ability to identify, within the text, when to emphasize the word or where to pause. The better these processes are, the more space they will be available in working memory for text comprehension. Furthermore, adequate prosody often indicates an effort by the reader to understand the text (Rasinski, et al. 2011).

According to NICHD (2000) most students acquire this fluency, progressively, from reading practice. However, there is a group of students who find it difficult to develop this skill. Thus, for example, this group of experts found that silent reading practice was ineffective when word recognition skills were not yet consolidated.

As a result of this conclusion, many programs have been proposed aimed at improving students' reading fluency. These programs are generally based on repeated reading practices (Chard, et al., 2002). It has been observed that greater reading fluency is achieved when repeated reading practices are done than when reading a different text each time (Ardoin, et al., 2016). Furthermore, fluency training is more effective when reading practice is guided, that is, with previous models of adequate reading before the students do it; than when this model is not available (Wexler, et al., 2008). In addition, to improve in prosody, it is not enough to work on reading speed, but it is also necessary to explicitly instruct in prosody (Ardoin, et al., 2013).

Guided repeated reading procedures include reading in pairs (Durán, & Valdebenito, 2014; Kuhn, & Schwanenflugel, 2006); and the readers' theater (Black, & Alison, 2007; Griffith, & Rasinski, 2004).

Vocabulary instruction.

To understand written texts, it is necessary for the reader to recognize the words written in their oral language and having sufficient semantic quality to be able to choose the most appropriate meaning; and if they do not understand the word, they can infer it from its morphological characteristics or the context (Calero, 2017; Perfetti, et al., 2005). To understand a text, 95-98% of the words it contains must be known (Hu, & Nation, 2000; Laufer, 1998). The vocabulary that a person

knows in the first years of learning to read (6-8 years) is an indicator of the understanding that they can make of the texts 10 years later (Cuningham & Stanovich, 1997).

The conclusions reached in NICHD (2000) regarding vocabulary were that vocabulary is also one of the most powerful indicators of text comprehension. In addition, three positive interventions were noted: (1) that the use of the computer is an effective form of vocabulary learning, either because it links it to the image or because it allows easy access to the meaning of unknown words that are read; (2) that working on the meaning of unknown words before reading favors comprehension; (3) that this vocabulary is better learned when working with it repeatedly and in different contexts or with different nuances.

But what kind of vocabulary to teach in our classrooms to improve their reading comprehension? According to Beck, et al. (2002) there are three types of vocabulary: type I or basic vocabulary, which is frequently used in everyday speech and people learn and understand them by living with their environment (for example, street lamp, happy, . .); type II vocabulary or high frequency words in a wide variety of written texts, but little used in daily conversation (for example, referred, scattered, restrained, ornamental ...); and type III vocabulary or words that are specific to a specific topic, but infrequent because they only appear in texts of a certain subject (heterotrophic, hypotenuse, syntactic analysis ...). Beck et al. (2002) argue that the vocabulary that the student body should mainly increase in order to obtain a greater benefit from written texts is type II vocabulary.

These words are often learned by good and avid readers during their reading practice; but it is more difficult to understand for those who do not have this reading practice. For this reason, an explicit and prolonged intervention is necessary from kindergarten or preschool levels to the last years of compulsory education in learning this type of vocabulary.

It is true that, in the classroom, when reading aloud, the teacher tends to influence the meaning of level II words (Beck, et al., 2008). These words can be worked on by explaining their meaning and embedding it in two or three sentences so that students make connections between the new vocabulary and its meaning

(Biemiller, & Boote, 2006). For their part, Beck, et al., (2008) recommend carrying out the following procedure with kindergarten and preschool students: for students to verbalize the words to create a phonological representation of them; for the word to be explained in a simple, "friendly" way; for the examples of use to be provided in different contexts; to have students provide their own examples; and for them to re-pronounce the words to build the phonological trace. This teaching-learning sequence can be varied or simplified in higher courses.

Instruction in text comprehension.

Text comprehension is an active process carried out by the reader to understand and interpret the information in a text. We can distinguish three levels of reading comprehension (Smith, 1989): literal, inferential and critical. We speak of literal comprehension when the reader captures the ideas of the text (keywords, the characteristics of objects or events, time and places; the order of actions ...) the main ideas and their structure. In addition, you can identify information within it. Inferential understanding involves looking for relationships and meanings beyond what is read in the text. Hypotheses and new ideas are formulated (undescribed actions, main ideas, predicting unexpressed events, interpreting figurative language ...) using previous knowledge on the subject. Finally, critical understanding requires the reader to make reasoned judgments about what has been read. This can mean: differentiating between reality and fantasy; contrasting what is stated in the text with other sources of information; rejecting or accepting what is written according to one's own moral code ... It is the most complex reading.

The expert committee of the United States National Reading Panel (2000) identified eight effective instructional methods:

1. Self-supervision of understanding and repair when there are misunderstandings.
2. Cooperative learning of reading to learn strategies with classmates.
3. The use of graphic organizers that represent the ideas of the text and their relationships.

4. Learn to build the structure of the story from questions: who, what, where, when and why of the plot or, in other cases, develop the timeline of the characters and the events that happen.
5. Answer the questions that the teacher asks about the text and their feedback on the answer.
6. Generate relevant self-questions about the text itself.
7. Prepare summaries by identifying the main ideas and integrating all the ideas into a coherent whole.
8. The explicit teaching by the teacher of several of the comprehension strategies mentioned above.

Digging deeper into text comprehension instruction. When we aim to teach students a text comprehension program, we must teach them four fundamental processes: (a) propose a reading objective and evaluate whether or not they are achieving it; (b) understand what the text says and identify relevant information and (c) learn to relate main ideas to each other by forming diagrams; (d) solve a problem with the texts. These processes must be taught both for the reading of continuous and discontinuous texts.

- (a) Set a reading objective and progress evaluation. As Solé (1987) says, reading is to satisfy some objectives that guide reading, and for this, obviously, the reader must set a reading objective. Therefore, the teacher must teach the students to build a reading objective. How? Discussing with the students from the title, *what the text will be about?* and making a prediction about the main nucleus that they will find in the text (Solé, 1996). If it were an expository text, cause effect, it would be said *"we are going to learn three causes why ..."* (Sánchez, 1998) and, as you read, evaluate if you achieve that learning objective or information, or not.
- (b) Understand what the text says and learn to find the relevant information to do an activity; interpret and relate the ideas presented; and, knowing how to build the main ideas in the text. These main ideas are sometimes explicit in the text itself; but other times, the reader has to build them with the help of the knowledge they have on the subject. Van Dijk (1977) talks about 4 processes called macro-rules: that of omission, where the

reader, given a sequence of propositions in the text, suppresses the information that is not necessary to interpret the meaning of the speech; that of selection when you choose the information from the text that you consider most relevant. In both cases, the information that is identified as relevant is in the text itself. With the macro-rule of generalization, the particular characteristics of a series of examples that appear in the text (objects, places or people ...) are abstracted and replaced by a hyperonym concept that does not come in the text, but is in the mind of the reader. With the macro-rule of integration or construction, a sequence of propositions that come in the text is replaced by a hierarchically superior idea that the reader has in their mind and that encompasses all of them. These macro-rules can be taught by asking students or having them wonder after reading a paragraph about: *What is the topic of this paragraph? What does it say on that subject? How can we summarize it?* (Sánchez, 1998).

- (c) Relate the main ideas to each other. Knowing the internal structure of texts affects their understanding and later memory (Britton, et al., 1980). Although each textual genre has its own organization; in this document only the structure of the stories is discussed [grammar of the stories by Stein and Glenn (1979)]; and to the schemes of the expository texts of Meyer, et al. (1980).

Structure of the stories: in the stories we can find two basic categories (Stein & Glenn (1979): the introduction and one or more episodes where the last one ends with the resolution. 1) Introduction provides two types of information, on the one hand, presents the main characters and, on the other hand, the context in which they live and / or what they do, 2) Episode / s, each one contains, in a basic way, information about one of the main characters (which appears from a initial event or reaction); a plan of conduct of the protagonist (which may well be an internal plan or an execution) and the expression of some type of solution or consequence.

Scheme of the expository texts: In the expository texts we can define five types of schemes (Meyer, et al., 1980): description, comparison,

sequence, cause-effect, problem-solution. 1) Description: consists of giving information about different characteristics of a topic, 2) Comparison: two topics are related and the differences in terms of criteria are highlighted, 3) Sequence: a series of main events occur in chronological order, 4) Cause-effect: reports on how certain events produce consequences and 5) Problem-solution: actions are described with the purpose of solving one or more problems. The students build these schemes when they relate the main ideas to each other. But the teacher must explicitly train the students to discover these schemes in the text they read and to represent them graphically. This guide will be more intense initially and, as the student appropriates this strategy, the teacher will withdraw (Sánchez, 1998).

- (d) Solve a problem with the texts. To develop reading competence, something must be done with the information obtained in the text. To fix this information you can do some activities such as recapitulating, not losing sight of the objective pursued with the reading and contrasting whether it has been achieved or not, writing a summary, making a comment, an outline or a learning journal (Read.es, Solé)

When what students are dealing with is not a continuous text, but a discontinuous one: they insert within a more general explanation a map, a graph, tables, posters, infographics, captions ... the students must learn where to start reading; when to stop reading a section and focus on another piece of information (a graph, table ...); and how to continue reading. In these cases, it is necessary to anticipate the learning sequence: that what is going to be learned has its order, although it is not easy to detect it. It must be explicitly taught to interpret that graph, historical map, chronological axis, table ... because they have a specific language and it condenses a lot of information. In this case, solving a problem with this information will be: being able to identify some data, knowing how to explain a graph, etc.

Finally, these techniques for understanding texts and deepening their content, have to be taught in an explicit way, on printed paper and on a computer screen.

In summary, the five components: phonological awareness, alphabetic principle, fluency, vocabulary, and comprehension, must be trained in an explicit way (with planned teaching and scaffolds), systematic (offering activities with an increasing degree of difficulty) and generalized (with intensity, in different subjects) during the entire period of teaching reading to all students to prevent difficulties and / or to attend from the beginning of schooling to people with specific difficulties in learning to read, whether they are poor decoders and / or poor understanding.

In summary:

To prevent SpLD in reading, the school curriculum should include within its programming, as a primary intervention, the teaching / learning of the five components that predict reading success: phonological awareness, alphabetic principle, fluency, vocabulary and comprehension.

These skills should be taught in an explicit way (with objectives and evaluation criteria), in sequence (what should be learned / taught in each course) and with guidelines on how to develop it (primary intervention).

If the student presents a delay in learning to read, they should receive a reinforcement in these skills inside / outside the classroom (secondary intervention).

If SpLD is detected in reading, whether in basic processes (dyslexia) or complex (poor comprehension), it should continue to be taught in a more intensive way (tertiary intervention).

In addition to these five skills that predict reading success, the expert committee of the United States National Reading Panel (2000) analyzed two other variables that could be related to reading success: 1) teacher training in teaching methods of reading. written language and comprehension strategies and 2) the effect of new technologies. But, with neither of the two variables this relationship could be established. Although this committee considered that there were indications that pointed in this direction, they could not identify them as criteria that promoted reading success because the researchers analyzed did not meet the scientific criteria required to offer these conclusions.

6.2. EDUCATIONAL ATTENTION THAT IS RECEIVED FROM THE CURRICULUM IN EACH COUNTRY

The curriculum, as a minimum, should include content, programs or teachings that influence the promotion of reading fluency and the comprehension

of texts for each and every one of the students. That is, it should incorporate within its contents the teaching / learning of those five skills which, according to scientific evidence, predict reading success. In this section the current curricula in the different countries will be analysed.

6.2.1 THE CURRICULUM IN SPAIN

6.2.1.1. The Early Childhood Education curriculum

In the Spanish State, the current Education Law (LOMLOE, 2020) indicates that the programming, management and development of early childhood education will, in any case, attend to the compensation of the effects that inequalities of cultural, social and economic origin have on learning and infant evolution, as well as early detection and early attention to specific needs for educational support.

Royal Decree 1630/2006, of December 29, which establishes the minimum teachings of the second cycle of Early Childhood Education dedicates its Art. 5 to educational content and curriculum. Regarding the reading, it expressly indicates:

"It is the responsibility of the educational administrations to promote a first approach to the foreign language in the learning of the second cycle of Early Childhood Education, especially in the last year. Likewise, they will promote a first approach to reading and writing, as well as early initiation experiences in basic numerical skills, in information and communication technologies and in visual and musical expression".

Likewise, in the areas of the second cycle of Early Childhood Education is that of "Languages: Communication and representation" where it is highlighted that in the second cycle of Early Childhood Education it is intended that boys and girls discover and explore the uses of reading and writing, awakening and consolidating their interest in them. The functional and meaningful use of reading and writing in the classroom will lead them, with the relevant educational intervention, to begin in the knowledge of some of the properties of the written text and its conventional characteristics whose acquisition has to be completed in the first cycle of Primary Education.

Thus, in relation to the area, the educational intervention will aim to develop, among others, the following capacities:

- Use language as an instrument of communication, representation, learning and enjoyment of the expression of ideas and feelings, and value oral language as a means of relating to others and regulating coexistence.
- Understand, reproduce and recreate some literary texts showing attitudes of appreciation, enjoyment and interest towards them.
- Get started in the social uses of reading and writing, exploring their functioning and valuing them as an instrument of communication, information and enjoyment.

As an evaluation criterion linked to reading in this stage, the following is established: Show interest in the written texts present in the classroom and in the immediate environment, beginning in their use, in understanding their purposes and in the knowledge of some characteristics of the written code. Take an interest and participate in the reading and writing situations that occur in the classroom. With this criterion, it is evaluated whether boys and girls' value and are interested in the written language, and they be initiated in the functional use of reading and writing as means of communication, information and enjoyment. Such interest will be shown in the attention and curiosity for the acts of reading and writing that are carried out in the classroom. The proper use of written material (books, newspapers, letters, labels, advertising ...) will be observed.

In Castilla - León, DECREE 122/2007, of December 27, which establishes the curriculum for the second cycle of Early Childhood Education in the Community of Castilla - León, indicates that, in accordance with the provisions of Art. 6 of the Royal Decree 1630/2006, the curriculum of the second cycle of Early Childhood Education will be organized in the following areas: a) Self-knowledge and personal autonomy; b) Knowledge of the environment, and c) Languages: Communication and representation. And in all of them a first approach to reading and writing will be promoted. It is insisted that this cycle will ensure that the child learns to use language, begins in the learning of reading and writing, and discovers the possibilities that both offer as a source of pleasure, fantasy, communication and information.

Specifically, in the area of languages: communication and representation, this rule also indicates that the practice of the two aspects of written language, reading and writing, cannot be understood in isolation; It requires the development of different skills, including sensory, motor and spatial skills, which are acquired through various activities related to other areas of expertise. Hence the importance of promoting globalized and meaningful learning to achieve a satisfactory and correct acquisition. Getting a supportive and enthusiastic attitude towards reading and writing is essential. It is important to plan activities that respond to the interests of the students and enable them to discover the functions of the written language as an instrument of information and communication, and as a resource for delight.

Offer all kinds of situations that put students in contact with written texts, starting with their own name, that of their classmates, words and phrases close to their world and which make sense to them, to discover their usefulness and establish positive relationships with written language is, without a doubt, a relevant factor in stimulating and motivating reading and writing. Schoolchildren in this cycle get in touch with the creative value of the language through play. Words acquire affective significance through the magic of sound and rhythm and are an inexhaustible source for imagination and fantasy. The narration and reading of stories by adults, the manipulation of texts, poems, songs, and fantastic stories, favor creative freedom, they foster an interest in reading and put the child in contact with the cultured language and aesthetic forms of literature. Thus, among the objectives pursued in this area are 6 and 7:

- Get started in the comprehensive reading of simple and motivating words and texts, using an appropriate intonation and rhythm. Discover the functionality of written text.
- Identify the words within the sentence and discriminate auditorily and visually the phonemes of a word, uppercase and lowercase.

In order to achieve these objectives, the following contents related to the approach to the written language are proposed, section 1.2.1. Development of learning to write and read.

- The written language as a means of communication, information and enjoyment. Interpret and label photos, images, etc. with their symbols and names. Perceiving differences and similarities. Interest in acquiring new codes, collecting data, analyzing, organizing and using them.
- Differentiation between written forms and other forms of graphic expression.
- Initiation to reading and writing through their usual and meaningful names, objects, words and phrases.
- Interest and willingness to use some conventions of the written language system, such as direction of writing, linearity, orientation and organization of space, and correct position when writing.
- Discovery of the usefulness of the written text through the practice of comprehensive reading.
- Production of different messages with their favorite words and graphic representation of the phonemes that compose them.
- Phonemic structure of speech: segmentation into words, syllables and phonemes. Phoneme-spelling correspondence, identification of vowel and consonant letters, upper and lower case.

6.2.1.2. The Primary Education curriculum

In Spain, the curriculum for this stage is guided by Royal Decree 126/2014, of February 28, which establishes the basic curriculum for Primary Education. In Art. 6 it specifies that students should be facilitated learning oral expression and comprehension, reading and writing. In Art. 7, the objectives of Primary Education are established, indicating that the stage will contribute to developing in the boys and girls the capacities that allow them, specifically in point e): "To know and use the Spanish language appropriately and, if any, the co-official language of the Autonomous Community and develop reading habits". Art. 9 (Learning process and individualized attention) indicates that in order to promote the habit of reading, a daily time will be devoted to it. Specifically, in the area of Spanish Language and Literature, it is said that literary reflection through the reading, comprehension and interpretation of significant texts favors the knowledge of the expressive possibilities of the language, develops the critical and creative capacity of the students, gives them access to knowledge of other times and cultures, and

confronts them with situations that enrich their experience of the world and favor self-knowledge.

The area of Spanish Language and Literature in Primary Education aims to develop basic skills in the use of the language: listening, speaking, reading and writing, in an integrated way. The acquisition of these communication skills can only be achieved through the reading of different kinds of texts, their understanding and reflection on them, bearing in mind that this should not be organized around tight and decontextualized disciplinary knowledge that prolongs the separation between linguistic reflection and the use of language, or between literary reflection and the pleasure of reading, but must be adjusted to the changing reality of an individual who lives immersed in a digital society and who is able to search for information immediately from Information and Communication Technologies.

- Read aloud different texts, with fluency and adequate intonation.
- Understand different types of texts adapted to age and using reading as a means of expanding vocabulary and fixing the correct spelling.
- Read different texts silently evaluating progress in speed and comprehension.
- Summarize a text read reflecting the structure and highlighting the main and supporting ideas.
- Use strategies for understanding texts of various kinds.
- Read different types of texts on your own initiative.
- Use scientific texts in different formats to collect information, expand knowledge and apply them in personal work.
- Concentrate on understanding and interpreting the meaning of the texts read.
- Use ICT in an efficient and responsible way for the search and treatment of information.
- Carry out the reading plan that responds to a systematic planning to improve reading efficiency and encourages a taste for reading.

As for the assessable learning standards, the following are collected:

- 1.1. Read aloud different types of age-appropriate texts with appropriate speed, fluency, and intonation.
- 1.2. Decode all kinds of words with precision and speed.
- 2.1. Understand the message, globally, and identify the main and secondary ideas of the texts read from reading a text aloud.
- 2.2. Show understanding, with a certain degree of detail, of different types of non-literary texts (expository, narrative, descriptive and argumentative) and of texts from everyday life.
- 3.1. Silently read texts of different complexity with the appropriate speed.
- 3.2. Make readings in silence briefly summarizing the texts read.
- 4.1. Capture their purpose. Identify the parts of the organizational structure of texts and analyze their thematic progression.
- 4.2. Prepare summaries of texts read. Identify the characteristic elements of the different types of texts.
- 4.3. Recognize some cohesion mechanisms in different types of text.
- 4.4. Produce diagrams from expository texts.
- 5.1. Interpret the value of the title and illustrations.
- 5.2. Mark the keywords in a text helping global understanding.
- 5.3. Activate previous knowledge using them to understand a text.
- 5.4. Make inferences and formulate hypotheses.
- 5.5. Understand the information contained in the graphics, establishing relationships with the information that appears in the text related to them.
- 5.6. Interpret key schemes, numbers, simple concept maps.
- 6.1. Schedule a weekly time to read different texts.
- 6.2. Voluntarily read texts proposed by the teacher.
- 7.1 Consult different bibliographic sources and computer support texts to obtain data and information to carry out individual or group work.

- 8.1. Deduce the meaning of words and expressions with the help of context.
- 8.2. Understand journalistic and advertising texts. Identify their communicative intention. Difference between information, opinion and advertising.
- 8.3. Infer, interpret, and hypothesize about content. Know how to relate linguistic elements with non-linguistic ones in journalistic and advertising texts.
- 8.4. Establish relationships between illustrations and text content, pose hypotheses, make predictions and identify the type of text and intention in reading.
- 8.5. Interpret figurative language, metaphors, personifications, hyperbole, and puns in advertising texts.
- 9.1. Know how to use computer media to obtain information.
- 9.2. Interpret the information and make a summary of it.
- 10.1 Use the library to locate a specific book safely and autonomously, applying the operating rules of a library.
- 10.2 Present the arguments of readings made, accounting for some bibliographic references: author, publisher, genre, illustrations.
- 10.3 Select readings with personal criteria and express a taste for reading various literary genres as a source of entertainment, expressing your opinion on the texts read.

In the community of Castilla - León DECREE 26/2016, of July 21, which establishes the curriculum and regulates the implementation, evaluation and development of Primary Education in the Community of Castilla - León, it is stated that the school hours for the area of

Spanish language and literature set a daily time, not less than thirty minutes in each course of the stage, destined to promote the habit and the acquisition of reading and writing strategies, included in the reading plan and the writing plan established in the curriculum, in addition to any additional sessions that may be

established for the development of programs to promote reading. Among the common contents for all the courses of the stage are those related to the promotion of techniques to encourage reading.

The purpose of the area of Spanish language and literature is to help students master the basic skills of the language: listening, speaking, reading and writing and initiating reflection on the structure of the language to improve and enrich the production of oral and written speech. It is especially relevant in the school context to consider reading as a basic skill for expanding competence in linguistic communication and learning. Thus, reading is the main access route to all areas, so contact with a diversity of texts is essential to access the original sources of knowledge. In block 2 of this area (Written communication: reading), the aim is for students to be able to understand texts of different degrees of complexity and of different genres, and reconstruct the ideas explicit and implicit in the text in order to develop their own critical and creative thinking. Understanding a text implies putting in place a series of reading strategies that should be practiced in the classroom and projected in all spheres of life and in all types of reading: reading to obtain information, reading to learn one's own language and reading for pleasure.

Therefore, the adequate development of linguistic competence is essential to improve learning and results, so the planning of tasks in this area must respond to a systematized methodological design: in reading (speed, comprehension and reading effectiveness). Literacy learning must be carried out in a context that gives it full meaning and makes it meaningful in the eyes of the students, so that they feel the need to use this type of language both in its comprehensive and expressive aspects, and all this from the very early moments of this learning. The development of the literacy habit must begin at a very early age, when the first learning to read and write begins, involving the entire educational community: teachers, students and families,

The contents of block 2 (Written communication: read) are the following:

- Graphic resources in written communication. Consolidation of the reading-writing system.

- Comprehension of texts read aloud and silently. Listening to different types of texts.
- Comprehension of texts according to their typology: texts typical of everyday situations of social relationship, texts from the media and the Internet, texts from the school environment.
- Reading of different types of text in any medium: descriptive, argumentative, expository, instructive and literary.
- Strategies for reading comprehension of texts: title, illustrations. Keywords, chapters
- Rereading. Anticipation of hypotheses and verification. Synthesis. Structure of the text. Types of texts. Context. Dictionary. Global sense of the text. Main and secondary ideas. Summary.
- Taste for reading. Reading habit. Reading of different texts as a source of information, delight and fun.
- Identification and critical assessment of the messages and values transmitted by the text.
- Criticism of the messages and values transmitted by a simple text.
- Selection of books according to personal taste.
- Reading plan.
- Use of different types of libraries to search for information and use it as a source of learning. Knowledge of and respect for the operating rules.
- Targeted use of ICT (search engines, forums, pages for children and young people) as a working tool to locate, select and organize information.

Regarding the evaluation criteria, the following are established:

- Read aloud different texts, with fluency and adequate intonation.
- Understand different types of texts adapted to age and using reading as a means of expanding vocabulary and fixing the correct spelling.
- Summarize a text read reflecting the structure and highlighting the main and supporting ideas.

- Read different texts silently evaluating progress in speed and comprehension.
- Use strategies for understanding texts of various kinds.
- Read different types of texts on your own initiative. Concentrate on understanding and interpreting the meaning of the texts read.
- Carry out the reading plan that responds to a systematic planning to improve reading efficiency and encourages a taste for reading.
- Use scientific texts in different supports to collect information, expand knowledge and apply them in personal work.
- Locate information in documentary texts (encyclopedias, dictionaries, catalogs and instruction brochures) and rework the information (synthesis, files, notes, diagrams, concept maps and summaries) for later use.
- Use ICT in an efficient and responsible way for the search and treatment of information.
- Concentrate on understanding and interpreting the meaning of the texts read.

Regarding the assessable learning standards considered in this standard, they are set out below:

- 1.1. Read aloud different types of age-appropriate texts with appropriate speed, fluency, and intonation.
- 1.2. Decode all kinds of words with precision and speed.
- 2.1. Understand the message, globally, and identify the main and secondary ideas of the texts from their reading aloud.
- 2.2. Show understanding, with a certain degree of detail, of different types of non-literary texts (expository, narrative, descriptive and argumentative) and of texts from everyday life.
- 3.1. Capture their purpose. Identify the parts of the organizational structure of texts and analyze their thematic progression.

- 3.2. Prepare summaries of texts read. Identify the characteristic elements of the different types of texts.
- 3.3. Recognize some cohesion mechanisms in different types of text.
- 3.4. Produce diagrams from expository texts.
- 4.1. Silently read texts of different complexity with the appropriate speed.
- 4.2. Read silently and then briefly summarizing the texts read.
- 5.1. Interpret the value of the title and illustrations.
- 5.2. Mark the keywords in a text that help global understanding.
- 5.3. Make inferences and formulate hypotheses.
- 5.4. Activate previous knowledge using them to understand a text.
- 5.5. Understand the information contained in the graphics, establishing relationships with the information that appears in the text related to them.
- 5.6. Interpret key schemes, numbers, simple concept maps.
- 6.1. Schedule a weekly time to read different texts.
- 6.2. Voluntarily read texts proposed by the teacher.
- 7.1. Select readings with personal criteria and express taste for reading various literary genres as a source of entertainment, expressing personal opinion on the texts read.
- 7.2. Present the arguments of readings made, accounting for some bibliographic references: author, publisher, genre, illustrations.
- 7.3. Use the library to locate a specific book safely and autonomously, applying the operating rules of a library.
- 8.1. Consult different bibliographic sources and computer support texts to obtain data and information to carry out individual or group work.
- 10.1. Know how to use computer media to obtain information.
- 10.2. Interpret the information and make a summary of it.

- 11.1. Deduce the meaning of words and expressions with the help of context.
- 11.2. Understand journalistic and advertising texts. Identify their communicative intention. Difference between information, opinion and advertising.
- 11.3. Infer, interpret, and hypothesize about content. Know how to relate linguistic elements with non-linguistic ones in journalistic and advertising texts.
- 11.4. Establish relationships between illustrations and text content, pose hypotheses, make predictions and identify the type of text and intention in reading.
- 11.5. Interpret figurative language, metaphors, personifications, hyperbole, and puns in advertising texts.

As methodological guidelines, it is indicated that in the Primary Education stage, special attention will be paid to the diversity of the students, their inclusion in the classroom, and in the center, individualized work, the prevention of learning difficulties and the mechanisms of reinforcement and support. As soon as the first difficulties are detected, the measures that the teaching team considers will be established: flexibility, reinforcements and methodological alternatives in the teaching and evaluation of the foreign language for students with high abilities or with disabilities, paying special attention to those who present difficulties in their oral expression. These adaptations will not be taken into account in any case to lower the grades obtained. Particularly, among the ordinary measures of attention to diversity there are preventive actions and detection of learning difficulties aimed at all students.

In the context of the continuous assessment process, when a student's progress is not adequate, educational reinforcement measures will be established. These measures will be adopted at any time during the course, as soon as difficulties are detected and will be aimed at guaranteeing the acquisition of the essential skills to continue the educational process.

If the individualized evaluation carried out on students at the end of the third year of Primary Education is unfavorable, the teaching team must adopt the most appropriate ordinary or extraordinary measures. These measures will be set in plans for the reinforcement and improvement of collective or individual results that make it possible to solve difficulties, in collaboration with families and through educational support resources. Where appropriate, the reinforcement and improvement plans will be developed throughout the fourth and fifth years of the stage. Finally, among the functions of the teacher tutors, is the one to attend to the learning difficulties of the students, to proceed to the personal adaptation of the curriculum.

From the curriculum of Early Childhood and Primary Education, if the teaching of the 5 skills that predict reading success is established.

Although some phonological awareness activities are named (identifying words within the sentence and auditory discriminating the phonemes of a word ...), these should be pointed out within the curriculum in a more explicit, detailed and sequenced way.

However, if the teaching of the alphabetic principle, reading fluency, vocabulary and reading comprehension is specified.

6.2.2.THE CURRICULUM IN ITALY

In Italy, the National Guidelines (NG) for the first cycle of education (from grade 1 to grade 8: Primary and Middle School) indicate the learning goals to be achieved in terms of competence development at the end of grades 3, 5 and 8 (MIUR, 2012). The National Guidelines have been published for the first time in 2007 with the latest version published in 2012 (MIUR, 2012). Moreover, in 2018 the document "Indicazioni Nazionali e Nuovi Scenari" (National Guidelines and New Scenarios, MIUR, 2018) discussed the National Guidelines by underlining some key aspects to be developed in the first cycle education.

In the National Guidelines we read that pre-primary school "has the responsibility to promote the command of the Italian language in all children, respecting the use of the language of origin [...] Appropriate didactic paths are aimed at extending the lexicon, at the correct pronunciation of sounds, words and

phrases, at the practice of the different modalities of verbal interaction (listening, speaking, talking, explaining), contributing to the development of logical and creative thinking” (MIUR, 2012, p.21). Regarding primary school, the National Guidelines underline “that during primary school the necessary tools for a "functional literacy" must be acquired: students must expand the oral heritage and must learn to read and write correctly and with an increasing enrichment of vocabulary. This means, on the one hand, mastering the techniques of reading and writing, on the other, learning to understand and produce meanings through written language” (MIUR, 2012, p. 28).

As for reading, the National Guidelines for the curriculum indicate the learning objectives to be achieved at the end of the third grade of primary school (after the first three years of school):

- Mastering instrumental (deciphering) reading both in the aloud mode, taking care of its expression, and in the silent one.
- Predict the content of a simple text based on some elements such as the title and images; understand the meaning of unknown words based on the text.
- Read texts (narrative, descriptive, informative), grasping the topic being talked about and identifying the main information and their relationship.
- Understand different types of texts with a view to practical, entertainment and leisure purposes.
- Read simple and short literary texts, both poetic and narrative, showing to be able to grasp the global meaning.
- Read simple dissemination texts to obtain useful information to expand knowledge on known topics.

Below, instead, are the learning objectives that must be achieved by the end of primary school, regarding reading:

- Employ silent reading and expressive reading aloud techniques.

- Use appropriate strategies when reading various types of text to analyze the content; ask questions at the beginning and during reading of the text; pick up clues useful in solving comprehension problems.
- Use the information in the title, pictures and captions to get an idea of the text one is going to read.
- Read and compare information from different texts to get an idea of a topic.
- Search for information in texts of various types and from various sources (tables, graphs, maps, etc.) for practical or cognitive purposes, applying techniques to support comprehension (such as underlining, constructing maps, etc.)
- Read narrative and descriptive texts, both realistic and fantastic, distinguishing literary invention from reality.
- Read narrative literary texts, in contemporary Italian language, and simple poetic texts, understanding the meaning, the most evident formal characteristics, the author's communicative intention and expressing a motivated personal opinion.

6.2.3.THE CURRICULUM IN ROMANIA

To what extent are curricula adapted to the principles of inclusive education? (UNESCO 2021):

Does the curriculum content include and represent all learners?

According to the legal provision (Education Law 2011 in Romanian), authors have to include elements on cultural diversity (ethnicity, language, religion) in curriculum documents: framework curriculum, syllabi, textbooks and other teaching materials. New framework curricula, approved in 2018, mention the fight against segregation, discrimination and genderbased violence. The gender perspective is reflected in the core curriculum and the national provision of base curriculum (Eurydice. National Education Systems, Romania, Chapter 14.2). In 2019, explicit elements on gender equality were however absent from curricula in primary and secondary education. There is improvement in recent curricula and

syllabi: older syllabi only included occasional references on gender equality, while current syllabi have complete lessons on this theme (David et al., 2020). Curriculum for primary education aims to provide first stage of basic education for all learners (Eurydice. National Education Systems, Romania, Chapter 5.2). Curriculum in lower secondary education promotes interculturality as one of the base competences. It allows to approach themes related to inclusive education.

Does the process of curriculum development involve the participation and contribution of different stakeholders?

The Ministry of National Education establishes the national curriculum for pre-university (pre-primary, primary and secondary) education, which includes curriculum frameworks, syllabi and textbooks. Schools, in cooperation with County School Inspectorates and representatives from the local community establish the school-based curriculum. They take into account the needs of learners, school and communities. The Institute for Educational Sciences is the key body that develop Romania's new curriculum and teacher guidelines on how to implement it (Education Law 2011 in Romanian, and Government Decision 1412/2009 in Romanian).

Is there guidance/procedures for schools to ensure that the curriculum content takes account of all learners (e.g. using flexibility to address differences due to gender, culture, religions, the ethnicities/nations living in the country, their history and culture, differences related to disability and socio-economic background, LGBT community).

Legal provision engages the Ministry of National Education, its subordinated institutions in charge with curriculum implementation and the teacher training centres to include diversity-related themes during teacher in-service training.

How IEPs (individual education plans) are implemented used across the school?

Education Law 2011 establishes individual educational plans and learners' portfolios to encourage differentiated learning for all learners (Education Law 2011). In primary education, beyond the 75% of the teaching and evaluation hours for their subject in the syllabus, teachers can use the remaining 25% time to address learners' individual education plans: remedial learning, knowledge

consolidation, higher performance incentive (Education Law 2011). Individual educational plans allow to design and implement educational activities. They provide medium-term learning objectives and adapt curriculum to the individual needs. These commissions include among their members representatives from the educational sector and child protection sector. They are institute through a decision of the County general inspector (cf. Order of the Ministry of National Education 1985/1305/5805/2016 approving the methodology of assessment and integrated intervention related to the certification of the level of disability, the educational and professional referral of children with SEN, and the rehabilitation of children with disabilities and/or SEN). The commissions are also related to County Resources and Educational Assistance Centres (CJRAE), and have various organizations from one county to another. They decide the educational pathways for each learner with disabilities and/or in preschool, primary school, and secondary education. They issue a certificate recommending the type of school for each school cycle of four years, corresponding to the primary, lower secondary, and upper secondary cycles. (The World Bank, undated, Advisory Services Agreement on Provision of Inputs for the Preparation of a Draft National Strategy and Action Plan on Social Inclusion and Poverty Reduction (2014-2020) Background Document - Volume II, p.187). The children with an assessment from the child protection sector have a covery/rehabilitation plan. This plan encourages the personal and social development, the maximisation of the potential, the transition to the adult life, the personal and social autonomy of the child for social inclusion. A 'plan of individualized services' is available for children with educational and professional orientation by educational orientation commissions. It includes the necessary psycho-educational services and interventions in order to assure the rehabilitation and the right to education of learners with SEN. It aims to facilitate the school and professional 'integration' and to promote child's intellectual, emotional and behavioural potential, contributing in this way to the social inclusion. (cf. Order of the Ministry of National Education 1985/1305/5805/2016 approving the methodology of assessment and integrated intervention related to the certification of the level of disability, the educational and profesional referral of children with SEN, and the rehabilitation of children with disabilities and/or SEN). The County Resources and Educational Assistance Centres (CJRAE), through

multidisciplinary teams, also provide psychosomatic assessment of learners in pre-primary education for their enrolment in the preparatory grade. They provide monitoring, identification and early support for all learners with SEN. The CJRAE are expected to provide schools, parents, and teachers the necessary support and professional assistance for an inclusive education (Education Law 2011, Art. 99).

Are there different curricula or programmes for specific groups of learners at risk of exclusion (e.g. ethnic minorities or minority language groups).

Alternative school programmes, programmes of psychological and pedagogical support, manuals and didactic methodologies for learners with SEN are mentioned in the Education Law 2011 (source: Education Law 2011). More information is rather available for special education. Multiple-level classes can be organised in special schools for learners with SEN, younger than 17, who didn't complete their compulsory education. The classes are based on the core subjects of primary education. Home schooling is available for persons with disabilities younger than 30 (Education Law 2011). Framework curricula, syllabi and textbooks are available for special education. They can be independent or adapted from mainstream education. Framework curricula include compulsory, optional subjects, and specific psychopedagogical, socio-professional and rehabilitation activities. Adapted curricula are applied at individual, class and group levels. School year 2019/20 was planned to start the implementation of new Framework curricula for special education (Eurydice. National Education Systems, Romania, Chapters 12 and 14).

The "Second Chance" Programme (Link in Romanian) is intended for young and adult persons, over 14 years, at risk, with various social backgrounds who have never, or partially, attended primary and lower secondary education.

They can continue their professional activities, while completing their compulsory education. The program provides:

- Educational activities.
- Recreational activities.
- Free time activities to consolidate already acquired competences.
- Remedial learning activities.

6.2.4. THE CURRICULUM IN PORTUGAL

In Portugal, the Essential Learning is the documents that guide the teaching practice, the reference basis for learning for all students. This document, together with the Student Profile, is the reference point for the evaluation. Essential Learning was approved on August 31st 2018 (Ordinance 8476-A/2018) and is defined as Common Curriculum Denominator (Denominador Curricular Comum in Portuguese), that is the set of knowledge, skills and attitudes that all students must acquire during the compulsory school. As regards the first cycle education, four documents are foreseen, for each of the four years that make up this level of education: first year, second year, third year and fourth year.

These documents specify the goals that must be achieved in the first four years of education. In particular, in the first two years, the aim is to promote the development of the following skills and competences:

- oral communication skills (comprehension and expression) to interact adequately in context (reproduce short messages, follow instructions, answer questions, express opinion, share of ideas and feelings);
- reading and writing skills, such as identify the letters of the alphabet, associate phonemes with their respective graphemes, write words with different levels of difficulty, read single words and small texts with correct articulation and prosody, knowing how to derive the meaning of the text and summarize the central ideas, write simple sentences and short texts using correctly punctuation marks (period, comma, question mark and point exclamation);
- linguistic awareness skills (phonological, morphological, lexical, syntactic, semantic);
- literary education, through the development of the following skills such as expressing ideas and emotions generated by active listening to texts, understanding narrative texts (sequence of events, intentions and emotions of the characters), explain the meaning of the poems heard or read.

7. SECONDARY AND TERTIARY INTERVENTION OF DEA IN READING

Once the people with difficulties in decoding and / or understanding texts have been identified, what is there to be done for students not to be left out of the system and to have the greatest possible success? (OECD, 2016). Administrations with educational powers must have a series of intervention actions planned. These will be secondary intervention or educational reinforcement, when the student is identified as part of the risk group, but does not yet have a diagnosis; and / or tertiary intervention or educational support, when the student already has a diagnosis of SpLD in reading.

In both secondary and tertiary interventions, people receive educational attention both inside and outside the classroom. However, there are two main differences in the care given to both groups: one, the intensity of the supports, which will be greater in tertiary care; and specificity: if decoding is the area most affected, phonological awareness, alphabetic principle and fluency skills will be reinforced; if the difficulties are in the oral language component, it will be necessary to work on vocabulary and comprehension as a priority. But if the student fails in the complex processes of text comprehension, which begins to be detected from the 4th year of Primary Education, it would be necessary to explicitly teach text comprehension procedures. On the other hand, as textbooks become more complex, specific text comprehension skills need to be addressed with all the student.

The second type of intervention should be aimed at finding formulas for it to be integrated into the reality of the classroom in the best possible educational and affective conditions. In other words, an inclusive classroom that welcomes the diversity of students and, in this specific case, people with SpLD in reading.

However, in addition to the intervention aimed directly at the student, other types of actions are also necessary, such as coordination between the school and the family and the training of teachers, both initial and continuous.

7.1. SECONDARY AND TERTIARY EDUCATIONAL CARE IN SPAIN

All educational administrations include guidelines on how to intervene with students with SpLD in reading, either through the Diversity Attention Plan, the Center's Educational Project or within the General Annual Programming.

Sometimes, non-significant modifications within the classroom is enough for students to be integrated and advance in learning. But, at other times, their reading difficulties are more serious and require more specific attention. This specific support needs changes throughout the primary stage.

When detection and intervention are carried out before 3rd or 4th grade of Primary Education, students receive reinforcement within the classroom and often also, specific attention outside the classroom. Generally, this care is performed two days a week for an hour. Sometimes they receive this care individually or sometimes in a small group; and the professionals in charge of this support are either the therapeutic pedagogy teacher, the language hearing teacher or both, depending on the need for support.

When they are already in higher grades of Primary Education (from 4th to 6th grade), two types of actions are also undertaken. Within the classroom, a non-significant curricular adaptation is carried out, which mainly affects how to better reach the written information (easy reading, large print, with audio support); how to adapt the carrying out of activities and participation (fewer activities or more time to do them; visual and graphic aids to do tasks, group work with distribution of activities or work in pairs that facilitate reading; and adaptation in the way of asking questions in the exam and / or its format). On the other hand, outside of the classroom and during school hours, they participate in school success programs. They are groups for support or reinforcement of instrumental skills.

In Secondary Education (12 to 18 years old), fewer students receive support in reading. Partly because, if they have done well in Primary Education, it is thought that they no longer need it; in part because the affected people themselves reject it, since they are at very critical ages and want to hide their difficulties from others. But more and more teachers are aware of the needs of these students (generally teachers of Language and Literature) and this awareness is spreading to make non-significant adaptations within the classroom. Although many school counselors

recognize the difficulties that still exist in convincing the entire educational staff of their needs and / or in learning how to offer them the help they need. In this work, counselors are often willing to carry out exam adaptations with the teachers.

During the University entrance exams, people with SpLD can request to benefit from the same support that they had been receiving in Baccalaureate. Some of the measures that the different universities take is that they can take the tests in another classroom, where they are offered more time to carry out the exercises and are given the option of being able to ask or reread together with the supervising teacher the questions of the exam.

At the University, with the mediation of the Disability Support Service, people with SpLD reading can benefit from adaptations, especially in the way of taking exams.

But, whether in the last years of Primary Education, as in Secondary Education or the University, the students with SpLD themselves reject the curricular adaptations because they do not want to stand out from their classmates. This must be respected. Although the solution would be mainly in the normalization of diversity (and with it dyslexia) within the classroom. In this way, both the affected person and their classmates understand what dyslexia is and the need for specific, generally non-significant, adaptations that they require.

However, this standardization is difficult to carry out, if an effort is not made to make the strengths of the students visible. They must feel that they are good at something: in sports, in visual, artistic, musical, scientific, social or personal skills ... Because reading difficulties can affect all areas of their life and they are much more than just a person with SpLD.

However, all these processes still need improvement. Although in recent years very important steps have been taken in this regard, there are still teachers who do not fully understand the need and / or the scope of non-significant curricular adaptations. You can hear a teacher say: *"I give those supports so that the student learns, but in evaluation I demand the same from them and under the same conditions as others."* Which means that the difficulties of people with SpLD and what an intervention with the DUA means has not really been understood.

In summary:

It is necessary to generalize to all classrooms and subjects the good practices of educational attention for students with SpLD in reading.

It is necessary to facilitate the understanding of the SpLD in the classroom before starting the curricular adaptations.

Promote the strengths of people with SpLD and make them evident to themselves and their peers

The adaptations that are made must be present throughout the educational process.

From teaching to evaluation.

From the moment of detection to the University and even in the competitive examinations.

7.2. UNIVERSAL LEARNING DESIGN: INCLUSIVE CARE AND PERSONALIZED ATTENTION

The Universal Learning Design (ULD) is an approach or a philosophy developed by the Center for Applied Special Technology (CAST, 2008) that guides on how to build learning spaces that allow responding to the diversity of students in an inclusive classroom.

The group of teachers who teach students with SpLD in collaboration with specialist teachers, must build flexible, open and accessible classroom schedules for all their students and, in this case in a specific way, for students with SpLD in reading. These actions, which must be agreed upon by the entire team, refer to three basic principles for a person to feel included: access and understanding of the information that is discussed in the classroom; participation with their classmates in the different classroom activities; and the managing of emotions together with the feeling of being motivated to continue learning with their peers.

Next, based on the ULD proposal and the guidelines it offers for educational care to people with SpLD, other actions will be proposed that are offered from the PRODISLEX intervention programs (2010) to develop inclusive care and personalized attention.

Regarding **the first principle on access to information and understanding of the information** treated in the classroom, whether it is presented in oral or written mode, it must be attended to these three levels:

Level 1. Adapt the written format and the mode of access to information so that people with SpLD in reading can access all the oral and written information that is worked on in the classroom. Some actions that can be carried out at this level are:

- Learning the alphabetic principle and reading fluency in the classroom should be reinforced with repeated readings: to participate in a play, read a story to students from another class, create an audiobook among the whole class, give away audios of stories...
- Written material is converted into friendlier texts by enlarging the font of the letter and using a simple font; spacing more paragraphs of the text; leaving gaps for students to answer homework questions and / or tests.
- The information must be offered in other ways that facilitate or replace access to the content of the text, such as: the use of text readers when reading from the computer, access to audiobooks or working in pairs so that another classmate can read aloud and the person with dyslexia reads the text quietly.
- The image is a source of access to the most direct meaning and facilitates understanding. For this reason, the use of videos is useful, which combines the content in oral language with the image. Spend more time explaining graphic information that accompanies printed texts (graphics, maps, images ...). Provide visual diagrams and / or the main information in boxes. Have access to the objects that are discussed in the classroom and be able to analyze, manipulate ...
- Do not send a copy from the blackboard, or statements from other books, as they dedicate a lot of effort to them and they are activities that involve cognitive gain. They can read the sentences and respond directly in their notebook.

Level 2. Offer options for understanding.

- Bring texts about the same content to the classroom, but with a different degree of linguistic complexity and let them choose which one to read. Thus, there may be texts that are easy to read, which are shorter, written with a closer vocabulary, with greater grammatical simplicity, accompanied by diagrams or illustrations, etc.
- Reserve time for explicit teaching of the level II lexicon of written texts, according to Beck et al. (2002), which is the most frequent vocabulary in written texts and less common in oral language. To do this, they can create glossaries or make cards with the vocabulary that they must incorporate: a drawing, a phrase where that vocabulary is used. When " they can be made easier. By searching with electronic devices, which is faster and, in many cases, they can complete their meaning with an illustration.
- Reinforce the teaching of text comprehension strategies: teach how to use the main ideas or macro-rules (from Van Dijk, & Kintsch, 1983) to find the main ideas of the text and identify the structure of the text (Meyer, 1984) and thus be able to build the mental model of the text (Johnson-Lairdm 1985); as well as teaching to understand discontinuous texts (Leer.es. Magdalena).

Level 3. Facilitate the understanding of oral discourse and written text.

- To better understand the teacher's explanations in the classroom, the main ideas should be contributed little by little and linked. Focusing attention on them, leaving time for them to assimilate and relate to their previous ideas. It should be taken into account that some people with SpLD in reading also have difficulties with spoken language; and / or with working memory. Therefore. These students should not be saturated with a lot of information at the same time.
- To facilitate the understanding of the written text, it is convenient to follow routines: ou starting by previously updating the student previous knowledge on the topic that is going to be written by posing question such as: "*What do we know about ...*" and setting a reading objective so that it

is possible to build a model of the situation which is going to be read: "*We are going to learn ...*"; and explicit text comprehension strategies are used: "What does the paragraph say?", "*How can it be summarized?*" In addition, they must be taught to make summaries, diagrams and / or apply the information to new tasks.

Regarding **the second principle, to provide means of action and representation** so that they can carry out activities and participate in the inclusive classroom, it is proposed:

Level 1. Encourage people with SpLD to be able to carry out the activity successfully.

- Build diverse learning environments in which they can participate with their peers. Sometimes assuming other parts of the task that are not directly associated with reading (building the model, graphically representing a concept, devising the contents or the distribution of information with another partner ...); and sometimes, facing the task of reading or writing with another partner, in such a way that the generation of ideas can fall on both of them; but the decoding task only on the other partner.
- Students will be told a day before what part of the text they will have to read aloud in class, so they have time to prepare in advance, avoiding taking them by surprise. On the other hand, before sending the students such text, the teacher needs to teach them the technique of repeated reading; pronounce and write the most complex words, etc.
- Allow more time for reading and writing assignments, including tests, or asking students to do fewer activities.
- Contemplate the use of props during the performance, such as a computer with a spelling error checker; using a voice (spoken language) to text converter; and / or not paying as much attention to the way they write, but to the content being communicated.
- Avoid the practice of having some students correct the spellings of other classmates.

Level 2. Facilitate expression, be it oral or written.

- Have or teach them to make scripts or outlines of the stories of projects that they must write or expose in the classroom. Also, explain the diagrams orally and in a group, before having it done individually in writing.
- Give the opportunity to express knowledge in different formats: a mural, a diagram, a drawing, orally, with a song, a video, staging a situation, etc.
- In the exams, in order not to force writing, they may be asked to make visual outlines of content, recognize printed information, relate concepts with arrows or order them to describe processes ...

Level 3. Promote the development of executive and self-regulation functions.

- Initially guide the student in the achievement of the learning objective that is pursued with each reading, as well as in the evaluation of comprehension and in the choice of strategies when the text has not been well understood or the activity has not been carried out well.
- Give greater prominence to the student working on the formulation of learning objectives and their evaluation: what have I learned, how have I learned it, what is the use of what I have learned. It is necessary to foresee times for this learning.

In **the third principle, providing multiple forms of involvement in the activity**, which in recent studies appears in the first place due to the importance it has, is intended:

Level 1. Capture their interest in the content of the books through shared or collaborative readings.

- The reading climate in the classroom should make students feel safe and not judged for their difficulties. In addition, the person with SpLD, like all their peers, must perceive that the support offered at school is natural and

fair, without privileges. (*Isn't it natural that if a child has myopia they put glasses on them?*).

- Include moments and experiences in which students experience successful reading. This is achieved when the meaning of the text is understood or the usefulness of its content is verified. In this sense, that the readings serve to be applied to a activity, that these activities are part of active methodologies in which the students, in addition to reading, must experiment, manipulate, do ... The printed paper is no longer the only learning pathway or to demonstrate learning and favors the quality of life of people with SpLD in reading.

Level 2. Use strategies to keep you striving to learn.

- Transmit to the student with SpLD messages of recognition for their effort, because it is known and it is noted that they work much more than others to achieve the same or, even, a lower result. But, that effort is valued and they are told that it serves to shape their character and to learn to face life. However, the proposed challenges must be adjusted to their capacities and proposed little by little so that they are encompassed and experience success. You must also know the relevance of those learnings. Because all that effort the make must be for something important.
- Maintain the support needed when evaluating reading and activities (*Did we remove the glasses from the student with myopia when taking the exam?*). Some evaluation criteria will have to be modified, such as those relating to reading fluency or writing without spelling mistakes ... Reading and writing fluency difficulties will be treated as symptoms of their difficulties, not as penalizing errors.

Level 3. Teach how to manage emotions, when anxiety or fear causes students to face different classroom situations in front of their classmates. Sometimes students will need emotional support and social skills training, to know how to fit in situations and know what to do, say or how to handle a situation. It is very difficult to avoid what others think, especially when you are at these levels of personality formation.

- Convey to the student that we know what is happening, that there are many people with SpLD in reading who succeed and that the bad thing about these difficulties is that the people who have it suffer. To avoid further suffering, it is agreed that teachers are going to inform such students when they are going to read in class, when they have to write on the blackboard and that, despite everything, the student will only carry out the activity if at that moment they feel ready. People with SpLD do not want to be different and tend to try very hard in these situations.
- Teach students to manage how to take well-marked tasks home. When they have to face study at home in the afternoons, they must know and, therefore, be taught, how to distribute their time between what is important and what is immediate, when to rest and to learn to use efficient study strategies.
- Teach students to manage the frustration that comes with trying so hard to not always achieve your goals. For example, reading aloud, even if they have prepared it, they may make a mistake ... They must learn not to be demanding with themselves in reading and writing tasks.

Figure 24. Guidelines to promote motivation, access to information and participation in students with SpLD in Reading

MOTIVATION	ACCESS TO AND UNDERSTANDING OF INFORMATION	PARTICIPATION
<p>TO CREATE AND MAINTAIN INTEREST</p> <ul style="list-style-type: none"> Shared or collaborative readings Safe and welcoming classroom environment: normalizing diversity; avoiding anxiety and fear of reading aloud or going to the board. Non-judgmental environment Possibility of reading success Work in groups Active methodology: projects, manipulation of material <p>TO MAINTAIN THE EFFORT</p> <ul style="list-style-type: none"> To know that for them it is needed to work harder but that they are understood and that they will receive help To Adequate/monitor reading challenges with aids for success To Know the relevance of goals To Modify assessment criteria: dyslexia symptoms are not penalized <p>TO SELF-REGULATE THEIR BEHAVIOR</p> <ul style="list-style-type: none"> Manage emotions: reduce anxiety and handle the situation. Manage studying: what to do, how to organize: sequence, timing 	<p>GIVE ACCESS TO INFORMATION WITH DIFFERENT FORMATS</p> <ul style="list-style-type: none"> Larger text font Less text on each sheet or separate questions with a gap for answers Text readers, audiotexts, having other people read out loud Videos, visual diagrams, images Reinforcement of reading skills: Grapheme-Phoneme conversion, RCG-P, fluency <p>OPTIONS FOR UNDERSTANDING</p> <ul style="list-style-type: none"> Text adapted to easy reading Teaching the lexicon of written texts Teaching of reading comprehension strategies: paraphrasing, main ideas, organization of texts <p>FOR READING COMPREHENSION</p> <ul style="list-style-type: none"> Access to reading and interpretation models Guides before, during and after reading Building on prior knowledge Updating the organization of ideas Sharing the meanings of the text Create a model for the text 	<p>TO PERFORM THE ACTIVITY</p> <ul style="list-style-type: none"> Create different spaces for participation: oral, data search, interpretation of images, graphs or diagrams Give more time/ less work Anticipate what the students are going to read in order for them to prepare the reading in advance Give Access to spelling rules or use of spell checkers. <p>TO EXPRESS THEMSELVES</p> <ul style="list-style-type: none"> Scripts to understand/ elaborate texts Other forms of expressing content: murals, photos, videos, recordings, etc. Exams/tests: selecting information, relating concepts or ideas, ordering ideas, oral or schematic answers <p>DEVELOPMENT OF EXECUTIVE FUNCTIONS</p> <ul style="list-style-type: none"> Having/creating reading goals Evaluating one's own comprehension with self-questions Correct misunderstandings

Source: Own elaboration, based on based on the structure of the ULD (CAST, 2008) and with contributions from the PRODISLEX educational care protocols (2010).

7.3 FAMILY OF STUDENTS WITH SPECIFIC LEARNING DIFFICULTIES IN READING AND SCHOOL

The school, the family and, lately, the associations, struggle to offer a quality education to people with SpLD.

Traditionally, it is the educational agents (tutor, support teachers, psychopedagogue) who detect the reading difficulties of the students and contact the families to inform them of the case, explain what it means to have dyslexia, inform them about the measures and supports that are given to them. they will offer at school to facilitate learning and show them how they can help you from home, whether emotionally or at school. They also listen to the concerns of families and, as far as possible, try to respond.

However, families are becoming better trained and communication is more two-way. Thus, sometimes it is the family that, observing how their child reads at home or reviewing their notebooks, informs the center that they are concerned about how their child is progressing in this skill. Given this information, teachers

review their progress and can put reinforcement and / or support measures if they see fit.

One piece of information that can alert teachers of the existence of a reading difficulty is the time it takes the student to do homework at home. When the family reports that their child spends most of the afternoon doing homework, it is a symptom of a problem. In view of this, evaluations should be undertaken to confirm the suspicion of ASD; and some non-significant curricular adaptations should be made, such as: not copying statements of the questions to be answered, fewer exercises, schematic or oral answers, the agreement that if one day the homework takes too long to complete, the student can take it home without finishing it...

Associations, for their part, are also playing an important role in family-school intermediation. Sometimes, as an entity that dialogues and / or puts pressure on their respective educational administrations to make these difficulties visible in the classroom and that action protocols are put in place. Efforts that are paying off.

The training action of these associations takes more and more prominence. Sometimes they participate in sessions that teacher training centers design for teachers to deepen their knowledge of SpLD in reading. Other times, it is directly them who propose awareness workshops and training in SpLD from an emotional and positive point of view to educational centers. This is emotional because they want to convey to them how a person with SpLD in reading feels in the school environment, a place where fundamentally they read and write. It is also positive because they also affect their strengths and how to take advantage of them in the classroom: creativity, drawing, image ...

They also offer educational centers the possibility of conducting standardization workshops within classrooms. Often the person with SpLD does not know well what is happening to them and refuses to be treated differently than others in the classroom. In addition, controversy can be created when other students perceive that a person is getting a privilege, especially in a field as sensitive as exams, and they do not understand why. For this reason, it is important that before starting a curricular adaptation in the classroom, workshops

are held where the classmates of the person with SpLD are made to experience what dyslexia is and the need for support measures that are going to be implemented.

Associations are a great source of help for families with children with dyslexia. Actions are aimed at improving and preventing relationships with their children from deteriorating and helping their children to cope with and overcome difficulties that may arise in the school environment. A) If,

- They train families in dyslexia and its manifestations. So that they don't think their children are lazy and see their difficulties as manifestations of dyslexia. In this way, they will understand their children better, and will be able to communicate better with them and with the teachers.
- They talk about the importance of sharing moments with their children outside of the studying environment. Because their childhood should not be marked, fundamentally, by "a struggle" to do homework.
- They reflect on the dilemma: They do not have hobbies in order to have time to do their homework, losing the opportunity of finding an activity where they are effortlessly competent. Because, often, they are punished by depriving them of what they are good at.
- They promote games and experiences that facilitate their reading progress, such as collaborative readings where the family and the child alternate reading a book.

But they also provide guidance on how to make school life easier for their children:

- How to help or supervise the completion of tasks. Sometimes they must supervise how to distribute the subjects that the child is going to work on that afternoon, how much time to dedicate, how to study. Sometimes they even have to supervise reinforcement activities that are done with the computer.
- How to collaborate and be an accomplice with teachers so that their children can be in a classroom environment that is more favorable to them.

In summary:

The teacher must be prepared to

Know how to transmit scientific but close information to families about dyslexia and / or text comprehension difficulties.

Explain to families what will be done from the school to help their children.

Tell families what they can do to help their children.

The family and teachers must

Believe in the potential of people with SpLD offer them unconditional support and teach them to identify and use their strengths.

Coordinate and feel like they are collaborators in a common project: that the student with SpLD experiences success in school.

7.4. NEED FOR TEACHER TRAINING: INITIAL AND ONGOING

In this section we will begin by analyzing the needs detected in the initial training on attention to DEA in reading of future teachers; and then what needs are observed or demanded by the teachers who are already active will be analyzed.

The committee of experts of the National Reading Panel of the United States (2000) also considered that teacher training was indeed a determining variable in the detection of and attention to reading SpLD. Based on this guideline, a series of investigations were started on what content should be taught in universities on this subject (Braunger, & Lewis, 2006).

Future teachers must be very aware that the teaching-learning strategies they bring to the classroom must be scientifically endorsed. For this reason, the University tries to provide future teachers with this rigorous scientific literature on the teaching of reading and DEA in reading; as well as the procedures to be updated

But teachers do not feel that they have been well prepared in teaching reading and in caring for students with specific difficulties. In general. The teachers who state that they are better prepared to teach reading competence are the support teachers (teachers of therapeutic pedagogy, and of hearing and language), then those of Early Childhood and Primary Education and, finally, other specialists (García, & Aguilera, sf).

Another research trend advocates that what is taught at the University starts from the analysis of school classrooms where students achieve good performance. Find out what that teacher does to reach those reading levels and what are the effective methodologies (Hess, et al., 2005).

Some of the obstacles that arise in Spain to train university students in the teaching of reading and care for students with SpLD are the following:

- The subjects of Language and Literature and Didactics of Language and Literature in the Primary Grade are usually more oriented to the teaching of the oral code and to reading animation than to the explicit teaching of reading. In addition, there is another serious drawback to this training, many future teachers are not usually great readers themselves. In this way, it is more difficult to transmit that love of reading.
- The content on what SpLD in reading are is studied by general teachers in a semester and within the subject Psychopedagogical foundations of attention to diversity, which is a semester subject and where a general overview of all the specific needs of educational support. Although the fundamentals of SpLD in reading are explained, students need a more extensive training
- Students who opt for the mention of the Master's Degree in Primary Education, mention Special Education, complete this training with the subject, SpLD, which, in addition to the SpLD in reading (dyslexia and difficulties in understanding texts), includes the SpLD in writing (dysorthography, dysgraphia and difficulties in written expression), the SpLD in mathematics (dyscalculia and difficulties in solving problems) and the Disorders of the Development of the Language (or people with Specific Disorders of the language). The content is so broad that it is difficult to delve into all of it properly in one semester. For this reason, they often have to continue training by taking a specific master's degree in this subject.
- As the explicit and intensive teaching of phonological awareness is barely included in the Language curriculum; the prevention activities and the

detection of difficulties are better known by teachers with the mention of Special Education than by those with general training.

8. REGARDING THE KNOWLEDGE THAT PRACTICING TEACHERS HAVE ABOUT SPECIFIC LEARNING DIFFICULTIES IN READING

García and Aguilera (nd) conducted a study based on teacher surveys asking about their didactic skills. In this study, a differentiation was made between four types of knowledge: (1) knowledge about development theory, language didactics, curriculum; (2) knowledge on how to do or how to find resources and develop a teaching-learning program to intervene in the classroom; (3) knowledge on how to be or aptitudes to coordinate and cooperate with the educational community; and (4) knowledge on how to be or having adaptability and flexibility in teaching or literary baggage. Teachers with less teaching experience are perceived to be more competent in the know-how; while the more experienced teachers consider that they are better in knowing how to be and knowing how to be. Nevertheless, teachers considered it important to adapt to the student's rhythm and individualized attention. They give importance to reading animation strategies but feel that they do not achieve good results in their classrooms (there is a lack of competition). They feel that their initial training was poor, although continuing education and higher education improved their skills. On the other hand, they give little importance to innovation in teaching, and it is what they feel least prepared for.

Deepening the teaching knowledge about the attention of students with reading difficulties, Guzmán et al. (2015) also found that teachers know from their own experience that these students require specific interventions inside and outside the classroom. They are better acquainted with interventions within the classroom (provide guidance and support in activities, work on self-esteem and motivation); but they are quite unaware of specific interventions to improve their deficient skills. That is, to carry out tasks of phonological awareness and to practice in an intensive way the conversion rules; or that phonetic methods are better for people with SpLD. This lack of training may be due to the fact that training in phonological awareness and reading fluency are carried out by specialist teachers. Activities that now also have to be part of the classroom schedules of general

teachers. In addition, many teachers maintain misconceptions about symptoms and diagnosis of SpLDs in reading, which interferes with their early identification. Therefore, training in this sense is urgently needed; but also generalized and mandatory screening tests in all educational centers to ensure their identification. which interferes in an early identification of them. Therefore, training in this sense is urgently needed; but also generalized and mandatory screening tests in all educational centers to ensure their identification. which interferes in an early identification of them.

But, although psychology has come a long way in the studies of what and how to teach, there is not a good transfer of these studies to daily practice. Teachers need advice and training to face the challenges of attending to diversity and train competent readers (Sánchez, 2010)

The education administration is responsible for their training and this is reinforced from several fronts, one is the teacher training and research centers, for example the autonomous community of Navarra includes in the teacher training program, courses to improve skills that have been shown as deficient in the evaluations carried out: reading comprehension, written expression, reading of discontinuous texts, digital reading, oral comprehension and oral expression, and emotional-affective competences. Another front is to facilitate that the educational centers themselves carry out internal training on topics of their interest, thus, they can request a seminar on a topic in which they want to improve and then, among them, organize themselves to continue deepening what they have learned and bring what they have learned to the classroom. Other types of actions that contribute to teacher training on DEA are study licenses, contests, awards, research projects, innovation and development of curricular materials and self-training. The educational resource centers of each educational administration can also be accessed to collect experiences and materials, such as, for example, in Navarra (CRENNA), in Aragón (ARASAAC), in Andalucía (CREA Andalucía) ...

In the page Leer.es, educational resources, dependent on the Ministry of Education and Professional Training, excellent contributions on how to intervene in the classroom and offer help for "Read to learn", "Read to do", "Read science" , "Learn to learn", ... can be found.

In summary:

Teacher training is a right and an obligation for all teachers. A responsibility that the teacher has towards students and society.

There is a need for greater training of generalist teachers to include in their classroom programming the skills that predict reading success, especially phonological awareness and fluency, as well as the teaching of text comprehension and reading animation.

Universal screening is still needed to detect at-risk students and that no student is left behind.

9. TECHNOLOGICAL RESOURCES TO MEET THE EDUCATIONAL NEEDS OF PEOPLE WITH SPECIFIC READING LEARNING DIFFICULTIES

The advancement of technology is rapidly changing reading situations and how the activity of reading is carried out. Each time readers are closer to the screens and further away from the paper. Reading is increasingly present in more areas of life and throughout the day: to access information, to find out what has happened in the world, to communicate with our close ones or to be aware of requirements: notifications, tasks, notices ...

The benefits of new technologies in reading success have already been studied by the National Reading Panel (NICHD, 2000), although they did not find sufficient scientific evidence to prove it. However, in those years, there were reviews focused on the positive effects of computer-assisted help as a complementary tool in the teaching-learning process of reading (Blok, et al., 2002), such as, for example, the virtual tutorial system of Wise et al. (2000) at the University of Colorado (USA).

Since then, the use of new technologies has proliferated in society and in the educational system in particular. Next, the use of ICT (Information and Communication Technologies) for learning and reinforcing the basic processes of reading are named, very briefly. Subsequently, information is presented on how technology can help in the comprehension of texts, in the realization of group activities and in social participation.

Regarding the teaching and reinforcement of basic reading processes: The use of a digital whiteboard is part of many teaching practices in the classroom. This is used frequently in Early Childhood Education to work on the five skills that predict reading success. There is a bank of phonological awareness and vocabulary learning activities on the ARASAAC (Community of Aragón) platform. Also, the LEEDUCA program (linked to the Malaga University in the Community of Andalusia) addresses, in a systematic and very well sequenced way, the five skills that predict reading success: phonological awareness, alphabetic principle, fluency, vocabulary and comprehension. To this, they can add the collective reading of stories that the

web allows. These resources are attractive to students and offer the advantage of multimodality. In addition, they allow simultaneous auditory processing with visual information processing (Mayer, 2002).

In the community of Catalonia, dependent on the University of Barcelona, the UBinding Project has been created. An App to detect at-risk students from 1st year of Primary Education, and offer an online intervention, especially to work on reading fluency and comprehension in early educational levels. The student works from home with the supervision of the family in sessions of 15-20 minutes and receives an intervention adapted to their needs, receiving frequent feedback on their progress.

For its part, the Canarian community has developed specific intervention workshops for students with SpLD in reading (INTERDEA), based on the computer programs Cognitiva.es and Tradislexia. This innovative project uses video games and is aimed at students from 2nd to 6th grade of Primary Education. The workshop takes place during school hours through activities that are self-applied by schoolchildren through the Internet, in eleven work sessions and two assessment sessions, with the teachers supervising what the students have done from their own computer.

On the other hand, the possibilities offered by the computer for the comprehension and composition of texts, as well as for participation in the classroom, is perfectly adjusted to the specific needs of people with SpLD. Thus, the use of text correctors and, even more, programs that convert speech into text, can facilitate the writing and participation of these people in group work.

With regard to reading, people with SpLD can benefit from three supports that facilitate access to the content of the text. These are: the fact of being able to enlarge the size of the letter and / or modify the font or type of letter, since people with SpLD read better the "stick" or simple letter; being able to use the Microsoft immersive reader or other screen readers, which highlight the part of the text that is being read so that it can be followed by the reader and, in addition, allow to regulate the reading speed; and the ability to easily access the meaning of words that appear in the text. The screen of a device (computer, tablet, telephone) allows access to multiple types of text. Generally, teachers propose for

the study pages that combine short text; accompanied by images, videos or audios and graphics.

It must be taken into account that reading on the web can be of three different types depending on the purpose that is pursued: scanning reading, immersive reading and in-depth reading. With scan reading, several pages are quickly accessed to get an idea of the information they contain, but the reader does not immerse themselves in any of them. With immersive reading, readers isolate themselves from the world by being immersed in the plot of the story, what happens when Reading a novel. Deep reading is what is used to build knowledge. New information is compared with the previous one and allows a critical rethinking of reality, developing empathy and multiple arguments (CERLALC, 2020).

But, especially, when the text is long and a deep reading must be applied on it (to learn), comprehension in digital text is poorer than in printed text (Singer & Alexander, 2017). Furthermore, the variable that correlates with better reading comprehension online is not the time of use of digital devices, but the free time dedicated to reading and, generally, this has been done in print (Stole & Schwipert, 2017). However, if specific training in text comprehension is necessary for all students, this need is greater for people with AED. First in print and then on screen; with short and then long texts; with continuous and discontinuous texts ...Therefore, these students must receive specific training in the treatment of all this information: how to highlight important ideas for the objective they are pursuing; when to go from a more general text to a graphic; how to interpret those graphs, maps, etc ...

However, the use of augmented reality (AR) and virtual reality (VR) can be a turning point if applied correctly to the educational world. Their potential is yet to be discovered and it is undeniable that they are tools that motivate young people. It can be applied to the teaching of skills that predict reading success: phonological awareness, learning and consolidation of the alphabetic principle, developing fluency and prosody, learning vocabulary and developing oral and written comprehension; as well facilitating learning through interactive books augmented in 3D (Dünser, & Hornecker, 2007).

BIBLIOGRAPHIC REFERENCES

- Abusamra, V., Miranda, A., & Ferreres, A. (2007). Evaluación de la iniciación e inhibición verbal en español. Adaptación y normas del test de Hayling. *Revista Argentina de Neuropsicología*, 9, 19-32.
- Acosta, V. et al. (2016). Rendimiento lector en alumnado con trastorno específico del lenguaje. Implicaciones educativas sobre diferentes subtipos. *Bordón. Revista De Pedagogía*, 68(4), 9-25.
<https://doi.org/10.13042/Bordon.2016.34963>
- Adams, M. J. (1990). *Beginning to read: Thinking and learning about print*. The MIT Press.
- Afflerbach, P. (1990). The influence of prior knowledge and text genre readers' prediction strategies. *Journal of Reading Behavior*, XX (29), 131-148.
- Agnelli Foundation (Eds.). (2011). *Rapporto sulla scuola in Italia 2011*. Roma: Laterza.
- Agrawal, J., et al. (2019). International policies, identification, and services for students with learning disabilities: An exploration across 10 countries. *Learning Disabilities: A Contemporary Journal*, 17(1), 95-114.
- Alegría, J. (2006). Por un enfoque psicolingüístico del aprendizaje de la lectura y sus dificultades-20 años después. *Infancia Aprendizaje*, 29(1), 93-111.
- Alves, I., Campos Pinto, P. & Pinto, T. J. (2020) Developing inclusive education in Portugal: Evidence and challenges. *Prospects* 49, 281-296.
<https://doi.org/10.1007/s11125-020-09504-y>
- American Psychiatric Association (APA). (2014). *Manual diagnóstico y estadístico de los trastornos mentales (DSM-5)*, 5ª Ed. Editorial Médica Panamericana.
- Ardoin, S. P., et al. (2013). Examining the impact of feedback and repeated readings on oral reading fluency: let's not forget prosody. *School Psychology Quarterly*, 28(4), 391-404.

- Ardoin, S. P., et al. (2016). Repeated versus wide Reading: A randomized control design study examining the impact of fluency interventions on underlying reading behavior. *Journal of School Psychology, 59*, 13-38.
- Artigas-Pallarés, J. (2009). Dislexia: enfermedad, trastorno o algo distinto. *Revista de Neurología 48(2)*, S63-S69.
- Baddeley, A.D. (2007). *Working memory, thought and action*. Nueva York, NY. Oxford University Press.
- Balbi, A. et al. (2009). Comprensión lectora y reconocimiento de palabras. *Ciencias Psicológicas III(2)*, 153-160.
- Barkley, R. A. (2012). *Barkley deficits in executive functioning scale - children and adolescents (BDEFS-CA)*. The Guilford Press.
- Beck, I. L. et al. (2002). *Bringing words to life: robust vocabulary instruction*. Guilford Press.
- Beck, I. L. et al. (2008). *Solving problems in the teaching of literacy. Creating robust vocabulary: Frequently asked questions and extended examples*. Guilford Press.
- Biancardi, A., et al. (2016). *BDE-2 Batteria per la discalculia evolutiva. Test per la diagnosi dei disturbi dell'elaborazione numerica e del calcolo in età evolutiva - 8-13 anni*. Trento: Erickson.
- Biemiller, A., & Boote, C. (2006). An effective method for building meaning vocabulary in primary grades. *Journal of Educational Psychology, 98(1)*, 44-62.
- Bishop, D., & Adams, C. (1990). A prospective study of the relationship between specific language impairment, phonological disorders and reading retardation. *Journal of Child Psychology and Psychiatry 31*, 1027-1050.
- Bishop, D., & Slowling, M. (2004). Developmental dyslexia and specific language impairment: Same or different? *Psychological Bulletin 130(6)*, 858-886.
- Bishop, D., et al. (2009) Children who read words accurately despite language impairment: who are they and how do they do it? *Child development, 80(2)*, 193-605.

- Black, A., & Alison, A. M. (2007). *A comprehensive guide to readers theatre: enhancing fluency and comprehension in middle school and beyond*. International Reading Association.
- Blok, H., et al. (2002). Computer-assisted instruction in support of beginning reading instruction: A review. *Review of Educational Research*, 72, 101-130.
- Braunger, J. & Lewis, O. (2006). *Building a knowledge base in Reading*. International Reading Association.
- Bravo Valdivieso, L. et al. (2001). Procesos predictivos del aprendizaje inicial de la lectura en primero básico. *Boletín de Investigación Educativa*, 16, 149-160.
- Britton, B. K., et al. (1980). Effects of the organization of text on memory: Tests of retrieval and response criterion hypotheses. *Journal of Experimental Psychology: Human Learning and Memory*, 6(5), 620-629.
- Broadbent, R. (2018). *European dyslexia charter 2018* Dyslexia Institute UK. Retrieved from: <https://www.eppgroup.eu/sites/default/files/attachments/2018/11/european-dyslexia-charter.pdf>
- Brown, A.L. et al. (1983). The development of plans for summarizing text. *Child Development*, 54, 968-979.
- Cain, K. & Oakhill, J. (2007). Assessment matters: Issues in the measurement of reading comprehension. *British Journal of Educational Psychology*, 76, 697-708.
- Cain, K. (2007). Syntactic awareness and reading ability: Is there any evidence for a special relationship). *Applied Psycholinguistics*, 28, 679-694.
- Cain, K. (2010). *Reading development and difficulties*. Wiley/Blackwell.
- Cain, K., et al. (2003). The ability to learn new word meanings from context by school-age children with and without language comprehension difficulties. *Journal of Child Language*, 30(3) 681-694.

- Cain, K., et al. (2004) Children's reading comprehension ability: concurrent prediction by working memory, verbal ability, and component skills. *Journal of Educational Psychology, 91*, 45-66.
- Calero, A. (2017). *Comprensión lectora. Estrategias que desarrollan lectores autorregulados*. Madrid, Comprension-lectora.org
- Cappa, C., & Giulivi, S. (2012). *Dyslexia across Europe*. Lifelong Learning Programme, European Union Funded Project: Euroface Consulting
- Carballo, M., & Cuadro, A. (2007). *La velocidad de nominación en el déficit lector*. Montevideo. Sociedad de Dislexia del Uruguay.
- Carretti, B. et al. (2005). Updating in de working memory of the good and poor comprehenders. *Journal Experimental Child Pchychology, 91*, 45-66.
- Casanova, M. A. (2011). De la educación especial a la inclusión educativa. Estado de la cuestión y retos pendientes *CEE. Revista Participación Educativa, 18*, 8-24.
- CAST (2008). *Universal design for learning guidelines version 1.0*. Author: The Center for Applied Special Technology.
- Catts, H. W. (1993). The relationship between speech-language impairments and Reading disabilities. *Journal of Speech and Hearing Research, 36*, 948-958.
- Catts, H. W. et al. (2006). Language deficits of por comprehenders: A case for the simple view of reading. *Journal of Speech, Language and Hearing Resarch, 29*, 278-293.
- CERLALC (Centro regional para el fomento del libro en América Latina y el Caribe). (2020). *Lectura en papel vs lectura en pantalla*. Bogotá (Colombia): Autor. Recuperado de: https://cerlalc.org/wp-content/uploads/2020/04/Cerlalc_Publicaciones_Dosier_Pantalla_vs_Papel_042020.pdf
- Cervera, M., & Toro, J. (2000). *Escalas magallanes de lectura y escritura. TALE2000*. Grupo ALBOR-COHS.

- Chard, D. J., Vaughn, S., & Tyler, B. J. (2002). A synthesis of research on effective interventions for building reading fluency with elementary students with learning disabilities. *Journal of Learning Disabilities, 35*(5), 386-406.
- Chen, R., & Vellutino, F. R. (1997). Prediction of reading ability: a cross-validation study of the simple view of reading. *Journal of Literacy Research, 29*, 1- 24.
- Coloma, C., et al. (2012). Desempeño lector y narrativo en escolares con trastorno específico del lenguaje. *Onomázein, 26*, 351-375.
- Coltheart, M. (1980). Reading phonological recoding and deep dyslexia. En M. Coltheart, K. Patterson & J. Marshall (Eds.), *Deep Dyslexia*. Routledge KeganPaul.
- Committee on the Rights of Persons with Disabilities. (2018). *Inquiry concerning Spain carried out by the Committee under article 6 of the Optional Protocol to the Convention*. Author. Retrieved from: <https://bit.ly/2LmFYve>
- CONFERENZA STATO-REGIONI DEL 25.07.2012: Schema di accordo tra Governo, Regioni e Province autonome di Trento e Bolzano su "Indicazioni per la diagnosi e la certificazione diagnostica dei disturbi specifici di apprendimento (DSA)"
- Conti-Ramsden, G., et al. (2001). Follow-up of children attending infant language units: Outcomes at 11 years of age. *International Journal of language and Communication Disorders, 36*(2), 207-219.
- Cornoldi C. & Carretti B. (2016). *Prove MT-3 Clinica. La valutazione delle abilità di lettura e comprensione per la scuola primaria e secondaria di I grado*. Firenze: Giunti Edu
- Cornoldi, C. & Tressoldi, P.E. (2014). Linee guida per la diagnosi dei profili di dislessia e disortografia previsti dalla legge 170: invito a un dibattito. *Psicologia Clinica dello Sviluppo, XVIII*(1), 75-142.
- Cornoldi, C., & Oakhill, R. D. (1996). *Reading comprehension difficulties: Processes and intervention*. Lawrence Erlbaum.
- Cornoldi, C., et al. (1996). Profiles of reading comprehension difficulties: and análisis of single cases. In C. Comoldi & J. Oakhill (Eds.). *Reading*

comprehension difficulties: Processes and intervention (pp. 113-136).
Lawrence Erlbaum.

Cornoldi, C., et al. (2020). *AC-MT-3 6-14 anni Prove per la clinica*. Trento:Erickson.

Cuetos, F., et al. (2012). *PROLEC-R: Batería de evaluación de los procesos lectores, Revisada*. TEA Ediciones.

Cuetos, F., et al. (2015). Test para la detección temprana de las dificultades en el aprendizaje de la lectura y escritura. *Revista de Pediatría Atención Primaria*, 17(66), 99-107.

Cuetos, F., et al. (2016). *PROLEC-SE-R. Batería de evaluación de los procesos lectores en secundaria y bachillerato – revisada*. TEA Ediciones.

Cuetos, F., et al. (2018). *PROESC. Batería de evaluación de los procesos de escritura*. TEA Ediciones.

De la Cruz, (2011). *Evaluación de la comprensión lectora ECL-I y ECL-II*. Madrid, TEA Ediciones.

DECRETO 122/2007, de 27 de diciembre, por el que se establece el currículo del segundo ciclo de la Educación Infantil en la Comunidad de Castilla y León. (B.O.C. y L. - N.º 1, de 2 de enero de 2008).

DECRETO 26/2016, de 21 de julio, por el que se establece el currículo y se regula la implantación, evaluación y desarrollo de la Educación Primaria en la Comunidad de Castilla y León. (B.O.C. y L. - N.º 142, de 25 de julio de 2016).

Decreto del Ministero dell'Istruzione, Università e della Ricerca n. 5669 del 12.07.2011

Decreto Interministeriale MIUR-MS del 17 aprile 2013. Linee guida per la predisposizione dei protocolli regionali per le attività di individuazione precoce dei casi sospetti di DSA.

Decreto Legislativo 13 aprile 2017, n. 66 Norme per la promozione dell'inclusione scolastica degli studenti con disabilità, a norma dell'articolo 1, commi 180 e 181, lettera c), della legge 13 luglio 2015, n. 107

Decreto-Lei n.º 319/91, de 23 de Agosto Portugal: Diário da República no 193, I Série-A.

Decreto-Lei n.º 46/86, de 14 de Outubro. Lei de Bases do Sistema Educativo. Portugal: Diário da República no 237, I Série.

Decreto-Lei n.º54/2018 de 6 de julho

DGEEC (2018). Necessidades especiais de educação, 2017/2018 [Special education needs, 2017/2018]. Lisboa: DGEEC. <https://www.dgeec.mec.pt/np4/224/>.

DGEEC (2020). Inquérito às necessidades especiais de educação nos estabelecimentos de ensino superior, 2019/2020. Lisboa: DGEEC. <https://www.dgeec.mec.pt/np4/428/>.

Domínguez de Rivero, M. J. (2007). El maestro y la escritura desde la perspectiva de la formación docente. *Sapiens. Revista Universitaria de investigación*, 8(2), 57-65. Recuperado de: <https://www.redalyc.org/pdf/410/41080204.pdf>

Domínguez, A. B., & Clemente, M. (1993). ¿Cómo desarrollar secuencialmente el conocimiento fonológico? *Comunicación, Lengua y Educación*, 19(29), 171-181.

Domínguez, A. B., et al. (2013). *PEALE. Pruebas de evaluación analítica de lengua escrita*. Universidad de Salamanca.

Duke, N. K. (2014): *Inside information: Developing powerful readers and writers of informational text through project-based instruction*. Scholastics.

Dünser, A., & Hornecker, E. (2007). An observational study of children interacting with an augmented story book. In *International Conference on Technologies for E-learning and Digital Entertainment* (pp. 305-315). Springer.

Durán, D., & Valdebenito, V. (2014). Desarrollo de la competencia lectora a través de la tutoría entre iguales como respuesta a la diversidad del alumnado. *Revista Latinoamericana de Educación Inclusiva*, 8(2), 141-160.

Dyslexia International. (2017). *Better training, better teaching*. Retrieved from: <https://www.dyslexia-and-literacy.international/wp-content/uploads/2016/04/DIDuke-Report-final-4-29-14.pdf>

Educação República Portuguesa, Aprendizagens essenciais | articulação com o perfil dos alunos 1º ano | 1º ciclo | português, julho de 2018 http://www.dge.mec.pt/sites/default/files/Curriculo/Aprendizagens_Essenciais/1_ciclo/ae_1.o_ano_1o_ciclo_eb_portugues.pdf

European Agency for Special Needs and Inclusive Education (2021). Country information for Portugal - Systems of support and specialist provision. <https://www.european-agency.org/country-information/portugal/legislation-and-policy>

European Agency for Special Needs and Inclusive Education (2021). Country information for Italy - Systems of support and specialist provision. <https://www.european-agency.org/country-information/italy/systems-of-support-and-specialist-provision>

European Commission. (2018). *Council Recommendation on the 2018 National Reform Programme of Spain and delivering a Council opinion on the 2018 Stability Programme of Spain*. Brussels: Author. Retrieved from: <https://bit.ly/2LmEHVa>

European Commission. (2020). *Achieving the European education área by 2025*, Retrieved from: https://ec.europa.eu/education/sites/default/files/document-librarydocs/eea-factsheet-sept2020_en.pdf

European Dyslexia Association (EDA) (2021). *Disability: A 2030 strategy for the European Union*. Autor. Retrieved from: <https://eda-info.eu/2021/03/24/disability-a-2030-strategy-for-theeuropean-union/>

European Union. (2021). *Union of Equality Strategy for the Rights of Persons with Disabilities 2021-2030*. Retrieved from: <https://ec.europa.eu/social/main.jsp?catId=738&langId=en&pubId=8376&furtherPubs=yes>

- Eurydice. (2012). *La atención al alumnado con dislexia en el sistema educativo en el contexto de las necesidades específicas de apoyo educativo*. Recuperado de: <https://www.educacionyfp.gob.es/educacion/mc/redie-eurydice/estudios-informes/eurydice/estudios.html>
- Fawcett, A. J., & Nicolson, R. I. (2004). El cerebelo: su implicación en la dislexia. *Revista Electrónica de Investigación Psicoeducativa*, 2(2), 35-58.
- Feola, A., et al. (2013). The protection of individuals affected with Specific Learning Disorders in the Italian Legislation. *Medical Legislation*, 166 (3), 177-181
- Ferreiro, E. (1991). *Desarrollo de la alfabetización: psicogénesis*. Aique.
- Flores, R. M. et al. (2010). *Lectura Inteligente: Un software para apoyar la formación de lectores en la escuela secundaria*. Universidad Nacional Autónoma de México.
- Flores, R. M., et al. (2015). Procesos cognoscitivos básicos asociados a las dificultades de comprensión lectora de alumnos de secundaria. *Revista Mexicana de Investigación Educativa*, 20(65), 581-605.
- Florit, E., & Cain, K. (2011). The simple view of reading: Is it valid for different types of alphabetic orthographies? *Educational Psychology Review*, 23, 553-576.
- Fons, M. (2000). Enseñar a leer y escribir. En M. Bigas & M. Correig, M. (Eds.). *Didáctica de la lengua en educación infantil* (pp. 157-177). Síntesis.
- Frith, U. (1997). Brain, mind and behaviour in dyslexia. In C. Hulme, & M. Snowling (Eds.). *Dyslexia: Biology, cognition and intervention* (1-19). Whurr Publishers Ltd.
- Frith, U., & Snowling, M. (1983). Reading for meaning and reading for sound in autistic and dyslexic children. *British Journal of Developmental Psychology*, 1, 329-342.
- Fuchs, D., & Fuchs, L. (2006). Introduction to response to intervention: What, why and how valid is it? *Reading Research Quarterly*, 41, 93-99.
- Fulbright, R. K., et al. (1999). The cerebellum`s role in reading: A functional MR imaging study. *American Journal of neuroradiology*, 20(10), 1925-1930.

- Galaburda, A., & Cestnick, L. (2003). Dislexia del desarrollo. *Revista de Neurología*, 36 (Supl. 1), S3- S9.
- García, E., et al. (2013). Problemas de comprensión en el alumnado de Educación Primaria y Educación Secundaria: un estudio de prevalencia en español. *European Journal of Investigation in Health Psychology and Education*, 3(2) 113-123.
- García, S., & Aguilera, M. C. (s.f.) La competencia docente en la enseñanza de la lectura y su formación desde la perspectiva del profesorado de infantil y primaria. Recuperado en <http://openaccess.uoc.edu/webapps/o2/bitstream/10609/120602/6/garasilTFM0620memoria.pdf>
- Gathercole, S., & Baddeley, A. (1993). *Working memory and language*. LEA.
- Goikoetxea, E. (2012). Las dificultades específicas de aprendizaje en el albor del siglo XXI. *RELIEVE. Revista Electrónica de Investigación y Evaluación Educativa*, 18(1), 1-16.
- González, D., et al. (2010). Prevalencia de las dificultades específicas de aprendizaje en la Educación Secundaria Obligatoria. *European Journal of Education and Psychology*, 3(2), 317-327.
- González, M. J., et al. (2010). Le comprensión lectora en educación secundaria. *Revista Iberoamericana de Educación*, 53, 1-11.
- Gough, P. B., & Tunmer, W. E. (1986). Decoding, reading, and reading disability. *Remedial and Special Education*, 7(1), 6-10.
- Griffith, L. B., & Rasinski, T. V. (2004). A focus on fluency: How one teacher incorporated fluency with her reading curriculum. *The Reading Teacher*, 58(2), 126-137.
- Guzmán, R., et al. (2017). Conocimientos del profesorado sobre las dificultades específicas de aprendizaje en lectura y escritura. *RIE Revista de Investigación Educativa*, 33(2), 289-302.
- Hess, F. M., et al. (2005). Finding the teachers we need. Policy perspectives. Retrieved from: <https://files.eric.ed.gov/fulltext/ED492996.pdf>

- Hirsch, E. D. (2003). Reading comprehension requires knowledge of words and the world. *American Educator*, 27(1), 10-31.
- Hoover, W. A., & Gough, P. B. (1990). The simple view of reading. *Reading and Writing: An Interdisciplinary Journal*, 2(2), 127-160.
- Hu, M., & Nation I. S. P. (2000). Vocabulary density and reading comprehension. *Reading in a Foreign Language*, 23, 403-430.
- Huang, Y. et al. (2020). Personality, behavior characteristics, and life quality impact of children with dyslexia. *International Journal of Environmental Research and Public Health*, 17(4), 1415.
- Ianes, D., et al. (2013). Light and shadows in the inclusive Italian school system: a reply to Giangreco, Doyle & Suter. *Life Span and Disability*, 1, 57-81
- Informe PISA 2018. Recuperado de: https://www.observatoriodelainfancia.es/ficherosoia/documentos/5943_d_InformePISA2018-Espana1.pdf
- Internacional Dyslexia Association (I.D.A.). (2017). *Información básica sobre dislexia*. Recuperado de: <http://idarmb.org/wp-content/uploads/2018/03/Dyslexia-Basics-Spanish.pdf>
- International Dyslexia Association (I.D.A.). (2014). *Todo lo que la familia debe saber*. Recuperado de: <https://dyslexiaida.org/ida-dyslexia-handbook/>
- ISS – Istituto Superiore di Sanità (2011), Disturbi specifici dell'apprendimento. Consensus Conference, Roma, 6-7 dicembre 2010, https://www.aiditalia.org/Media/Documents/consensus/Cc_Disturbi_Apprendimento.pdf.
- Jiménez, J. E. (2010). Response to Intervention (RtI) Model: A promising alternative for identifying students with learning disabilities? *Psicothema*, 22, 932-934.
- Jiménez, J. E., & Gutiérrez, N. (2018). IPAL: Indicadores de progreso de aprendizaje en lectura. En, J. E. Jiménez (ed.) *Modelo de respuesta a la Intervención. Un enfoque preventivo para el abordaje de las dificultades específicas de aprendizaje*. Pirámide.

- Jiménez, J. E., et al. (2007). *SICOLE-R-Primaria: Un sistema de evaluación de los procesos cognitivos en la dislexia mediante ayuda asistida a través del ordenador [Software informático]*. Universidad de La Laguna.
- Johnson- Laird, P. (1985). Mental models. in Aitkenhead. in A.M., & J. M. Slack. (Eds). *Issues in cognitive modelling* (pp. 81-99). Open University Press.
- Katusic, S. K., et al. (2001). Incidence of reading disability in a population-based birth cohort (1976-1982). *Clinic Proceedings*, 76(11), 1081-1092.
- Kavale, K. A., & Forness, S. R. (1996). Learning disability grows up: Rehabilitation issues for individuals with learning disabilities. *Journal of Rehabilitation*, 62, 34-41.
- Kelso, K., et al. (2007). Reading comprehension in children with specific language impairment: an examination of two subgroups. *International Journal of Language and Communication Disorders*, 42(1), 39-57.
- Kintsch, W. (1994). Text comprehension, memory, and learning. *American Psychologist*, 49(4), 294-303.
- Kintsch, W. (1998). *Comprehension: A paradigm for cognition*. Cambridge University Press.
- Kirby, J. R., & Savage, R. S. (2008) Can the simple view deal with the complexities of Reading? *Literacy*, 42(2), 75-82.
- Kirk, S. A., & Bateman, B. (1962). Diagnosis and remediation of learning disabilities. *Exceptional Children*, 29, 73-78.
- Kuhn, M. R., & Schwanenflugel, P. J. (2006). All oral reading practice is not equal (or how can I integrate fluency instruction into my classroom?). *Literacy Teaching and Learning*, 11, 1-20.
- Laufer, B. (1989). What percentage of text-lexis is essential for comprehension? In C. Lauren & M. Nordman (Eds.). *Special Language: From Humans to Thinking Machines*, (pp. 316-323). Multilingual Matters.
- Leer.es. Madalena, J.I. [video]. *Textos discontinuos*. Leer.es Portal de recursos educativos del Ministerio de Educación y Formación Profesional. Recuperado de: https://leer.es/mediateca_videos/4-tipos-de-textos-discontinuos/

Leer.es. Sánchez, E. [video]. *Leer es un acto complejo. Apoyos para la lectura.*

Leer.es Portal de recursos educativos del Ministerio de Educación y Formación Profesional. Recuperado de: <https://leer.es/?s=Leer+es+un+acto+complejo>

Leer.es. Solé, I. [video]. *Leer para aprender.* Leer.es Portal de recursos educativos Ministerio de Educación y Formación Profesional. Recuperado de: <https://leer.es/>

Legge 30 marzo 1971, n. 118: "Conversione in legge del D.L. 30 gennaio 1971, n. 5 e nuove norme in favore dei mutilati ed invalidi civili."

Legge 4 agosto 1977, n. 517: "Norme sulla valutazione degli alunni e sull'abolizione degli esami di riparazione nonché altre norme di modifica dell'ordinamento scolastico".

Legge 5 febbraio 1992, n.104 'Legge-quadro per l'assistenza, l'integrazione sociale e i diritti delle persone handicappate'. (GU n.39 del 17-2-1992 - Suppl. Ordinario n. 30)

Legge 8 ottobre 2010, n. 170 'Nuove norme in materia di disturbi specifici di apprendimento in ambito scolastico' (GU n.244 del 18-10-2010) [Law 170/2010 'New regulations on specific learning disorders at school', approved on 8th October 2010 and published on the Official Gazette of the Italian Republic No. 244 on 18th October 2010]

Lei n.º 21/2008, de 12 de Maio. Portugal: Diário da República no 91, I Série.

Lei n.º 9/1989, de 2 de Maio, Lei de Bases da Prevenção e da Reabilitação e Integração das Pessoas com Deficiência

Ley Orgánica 1/1990, de 3 de octubre, de Ordenación General del Sistema Educativo. BOE, 238, de 4 de octubre de 1990.

Ley Orgánica 10/2002, de 23 de diciembre, de Calidad de la Educación. BOE, 307, de 24 diciembre 2002.

Ley Orgánica 2/2006, de 3 de mayo, de Educación. BOE, 106, de 4 mayo 2006.

Ley Orgánica 3/2020, de 29 de diciembre, por la que se modifica la Ley Orgánica 2/2006, de 3 de mayo, de Educación. 340, de 30 de diciembre de 2020.

Ley Orgánica 8/2013, de 9 de diciembre, para la Mejora de la Calidad Educativa. BOE, 295, de 10 de diciembre de 2013.

Lezcano Barbero, F., & Casado Muñoz, R. (2021). *Análisis de las estadísticas sobre las Necesidades Específicas de Apoyo Educativo en España y Castilla y León. Working paper proyecto AUPAR-T*. Universidad de Burgos. https://www.ubu.es/sites/default/files/portal_page/files/working_paper_2_mayo_2021.pdf

López, M. et al. (2017). La gamificación: la enseñanza de la lectoescritura en dificultades de aprendizaje. *Actas del V Congreso Internacional de Videojuegos y Educación (CIVE 17)* ISBN 978-84-697-3849-8.

Lyon, G. R., et al. (2001). Rethinking learning-disabilities. In C. E. Finn Jr., A. J. Rotherham, & C. R. Hokanson Jr. (Eds.), *Rethinking special education for a new century* (pp. 259-287). Thomas B. Fordham Foundation.

Lyon, G. R., et al. (2003). A definition of dyslexia. *Annals of Dyslexia*, 53, 1-14.

Maggiolini, S., & Molteni, P. (2013). University and Disability: An Italian Experience of Inclusion. *Journal of Postsecondary Education and Disability*, 26(3), 249–262

Mann, V. (1986). Phonological awareness: The role of reading experience. In P. Bertelson (Ed.), *The onset of literacy: Cognitive processes in reading acquisition* (pp. 65-92). The MIT Press

Manzano-Soto, N. (Coord.) (2021). *Avanzando hacia una educación inclusiva. La atención al alumnado con necesidades educativas especiales en las CC. AA. a través de la revisión de la normativa*. Ministerio de Educación y Formación Profesional.

Marshall, J. C., & Newcombe, F. (1973): Patterns of paralexia: A psycholinguistic approach. *Journal of Psycholinguistic Research*, 2, 175-200.

Mayer, R. E. (2001). *Psicología educativa*. Prentice-Hall.

McNamara, D. S. (2004). Aprender del texto: efectos de la estructura textual y las estrategias del lector. *Revista Signos*, 37, 19-30.

- Meyer, B. J. (1975). Identification of the structure of prose and its implication for the study of reading and memory. *Journal of Reading Behaviour*, 7, 7-47.
- Meyer, B. J. (1984). Text dimensions and cognitive processing. In H. Mandl, N. Stein, & T. Trabasso (comps) *Learning and comprehension of text*. Lawrence Erlbaum.
- Meyer, B. J., et al. (1980). Use of top-level structure in text: Key for reading comprehension of ninth-grade students. *Reading Research Quarterly*, 16 (1), 72-103.
- MI – DGSIS - Ufficio Gestione Patrimonio informativo e Statistica (2020). I principali dati relativi agli alunni con DSA, anno scolastico 2018/2019
- Ministerio de Educación y Formación Profesional (2012). La atención al alumnado con dislexia en el sistema educativo en el contexto de las necesidades específicas de apoyo educativo. Colección Eurydice España-redie. Recuperado de <https://www.educacionyfp.gob.es/dam/jcr:4f7e9108-88bc-4bf6-b188-34dd6d2c2a7f/atencion-alumnado-dislexia.pdf>
- Ministerio de Educación y Formación Profesional. (2021). *Enseñanzas no universitarias. Alumnado con necesidad específica de apoyo educativo*. Recuperado de: <http://www.educacionyfp.gob.es/servicios-al-ciudadano-mecd/estadisticas/educacion/no-universitaria/alumnado/necesidades-apoyo.html>
- Ministero dell'Istruzione, Università e Ricerca (MIUR) (2012). Indicazioni nazionali per il curricolo della scuola dell'infanzia e del primo ciclo di istruzione. <http://www.indicazioninazionali.it/2018/08/26/indicazioni-2012/>
- Ministero dell'Istruzione, Università e Ricerca (MIUR) (2018). Indicazioni nazionali e nuovi scenari. <https://www.miur.gov.it/web/guest/-/indicazioni-nazionali-di-infanzia-e-primo-ciclo-piu-attenzione-alle-competenze-di-cittadinanza>
- MIUR (2012). Direttiva Ministeriale 27 dicembre 2012 "*Strumenti d'intervento per alunni con bisogni educativi speciali e organizzazione territoriale per l'inclusione scolastica*".

- MIUR (2012). Linee Guida per il diritto allo studio degli alunni e degli studenti con Disturbi Specifici dell'Apprendimenti, Allegate al Decreto Ministeriale del 12 Luglio 2012.
- MIUR (2013). Circolare Ministeriale n.8 con oggetto Direttiva Ministeriale 27 dicembre 2012 "*Strumenti d'intervento per alunni con bisogni educativi speciali e organizzazione territoriale per l'inclusione scolastica. Indicazioni operative*".
- Monfort, M., & Juárez, A. (2001). *Test fonológico inducido*. CEPE.
- Montesano, L., & Valenti, A. (2020). Didattica universitaria e DSA: barriere e facilitatori. In L. Montesano, A. Valenti, C. Cornoldi (Eds.), *LSC-SUA. Batteria per la valutazione dei DSA e altri disturbi in studenti universitari e adulti* (pp. 29-42). Erickson: Trento.
- Morais, J., et al. (1987). The relationship between segmental analysis and alphabetic literacy: An interactive view. *Cahiers de Psychologie Cognitive*, 7, 415-438.
- Moretti, R., et al. (2002). Reading errors in patients with cerebellar vermis lesión. *Journal Neurology*, 249 (4), 461-468.
- Morton, J. (1969). Interaction of information in word recognition. *Psychological Review*, 76(2), 165-178.
- Nagy, W. E., & Scott, J. A. (2000). Vocabulary processes. In M. L. Kamil, et al. (Eds.), *Handbook of Reading Research*, (vol 3, pp. 269-284) Hillsdale, NJ, Lawrence Erlbaum.
- Nation, K. (2007). Childrens reading comprehension difficulties. In M. J. Snowling, & C. Hulme: *The Science of Reading. A handbook*. Blackwell Publishing.
- Nation, K., et al. (2004). Dissecting the relationship between language skills and learning to read: Semantic and phonological contributions to new vocabulary learning in children with poor reading comprehension. *Advances in Speech-Language Pathology*, 9(2), 131-139.
- NICHHD. (2000). *Report of the National Reading Panel. Teaching children to read: An evidence-based assessment of the scientific research literature on*

reading and its implications for reading instruction. (No. 00-4769). Washington D.C.: U.S. Government Printing Office. Retrieved from: <https://www.nichd.nih.gov/sites/default/files/publications/pubs/nrp/Documents/report.pdf>

Nunes, T., et al. (2006). The effects of learning to spell on children's awareness of morphology. *Reading and Writing, 19*(7), 767– 787.

Oakhill, J., et al. (2005). Levels of comprehension monitoring and working memory in good and poor comprehenders. *Reading and Writing, 18*(7-9), 657-686.

OCDE (2016). *Pisa 2015. Resultados Clave.* Recuperado de: <https://www.oecd.org/pisa/pisa-2015-results-in-focus-ESP.pdf>

Organización de Naciones Unidas para la Educación, la ciencia y la cultura UNESCO) (2016). *XI y XII Jornadas de cooperación educativa con Iberoamérica sobre educación especial e inclusión educativa.* Ministerio de Educación, Cultura y Deporte de España. Recuperado de: <https://www.educacionyfp.gob.es/dam/jcr:35ac31ee-c2e6-4835-962f-c7d01e757103/xi%20y%20xii%20jornadas%20de%20cooperacion%2020-10-16.pdf>

Ortiz, M. R., & Jiménez, J. E. (2001). Concepciones tempranas acerca del lenguaje escrito en prelectores. *Infancia y Aprendizaje, 24*, 215-231.

Pérez, M., et al. (2016). El conocimiento de la estructura textual: una estrategia clave que ayuda al alumnado de Educación Primaria en la comprensión de textos informativos. *Didáctica. Lengua y Literatura, 28*, 215-242.

Pérez, P., & Zayas, F. (2008). Empezar con buen pie. El aprendizaje inicial de la lectura y escritura en infantil y primer ciclo de primaria y en lengua extranjera. En P. Pérez & F. Zayas. *Competencia en comunicación lingüística* (pp. 1-11). Alianza Editorial.

Perfetti, C. A., et al. (2005). *The acquisition of reading comprehension skill.* In M. J. Snowling & C. Hulme (Eds.), *Blackwell handbooks of developmental psychology. The science of reading: A handbook* (pp. 227–247). Blackwell.

Perfetti, C., et al. (2008). Comprehension skills and words-to-text integration processes. *Appl Cognitive Psychology, 22*, 303-318

- PRODISLEX (2010). *Protocolos de detección de las dificultades lectoras y de actuación en el aula DISFAM*. Recuperado de: <https://www.disfam.org/prodislex/>
- Proyecto LEEDUCA. *Hacia un modelo integral de intervención en las dificultades de aprendizaje de la lectura*. Recuperado de: <https://www.leeduca.uma.es/leeduca/>
- Puyuelo, M., et al. (2007). *BLOC- Screening revisado. Batería del lenguaje objetiva y criterial*. Editorial Masson
- Rasinski, T., et al. (2011). Reading fluency. In M. Kamil, et al. Afflerbach. *Handbook of Reading Research* (pp. 286-319). Routledge.
- Real Decreto 126/2014, de 28 de febrero, por el que se establece el currículo básico de la Educación Primaria. Ministerio de Educación, Cultura y Deporte. (BOE nº 52, de 1 de marzo de 2014).
- Real Decreto 1630/2006, de 29 de diciembre, por el que se establecen las enseñanzas mínimas del segundo ciclo de Educación infantil. Ministerio de Educación, Cultura y Deporte. (BOE nº 4, de 4 de enero de 2007).
- Rego, L., & Bryant, P. E. (1993). The connection between phonological, syntactic and semantic skills and children's reading and spelling. *European Journal of Psychology of Education, 8*(3), 235-246,
- Rello, L. (2018). *Superar la dislexia: Una experiencia personal a través de la investigación*. Paidós.
- Reynolds, D., et al. (2003). Evaluation of an exercise-based treatment for children with reading difficulties. *Dyslexia, 9*(1), 48-71.
- Ribaupierre, A., & Hitch, G. J. (Eds.) (1994). *The Development of working memory*. Lawrence Erlbaum Associates.
- Rodrigues, D., & Nogueira, J. (2011). Educação especial e inclusiva em Portugal: fatos e opções. *Educação especial e inclusiva em Portugal, 17*(1), 3-20.
- Romero, J., & González, M. (2001). *Prácticas de comprensión lectora: estrategias para el aprendizaje*. Alianza Editorial.

- Sabornie, E. J. (1994). Social-affective characteristics in early adolescents identified as learning disabled and nondisabled. *Learning Disability Quarterly*, 17, 268-279.
- Sánchez, E. (1988). Aprender a leer y leer para aprender. *Infancia y Aprendizaje*, 44, 35-57.
- Sánchez, E. (1998). *Comprensión y redacción de textos: dificultades y ayudas*. Edebé.
- Sánchez, E. (coord.). (2010). *La lectura en el aula. Qué se hace, qué se puede hacer y que se debe hacer*. Barcelona, Graò.
- Sánchez, E., et al. (2002). Competencia retórica. Una propuesta para interpretar dificultades de comprensión. *Psicothema*, 14(1), 77-85.
- Sartori, G., et al. (1995; 2007), *DDE-2. Batteria per la Valutazione della Dislessia e della Disortografia Evolutiva-2*. Firenze: Giunti O.S.
- Scardamalia, M. & Bereiter, C. (1984) Development of strategies in text processing. En H. Mandl, N.L. Stein y T. Trabasso. *Learning and comprehension of text*. Hillsdale, New Jersey: Erlbaum.
- Serniclaes, W. (2011). Percepción alofónica en la dislexia: una revisión. *Escritos de Psicología*, 4(2), 25-34.
- Siegel, L. S. (1999). Issues in the definition and diagnosis of learning disabilities: A perspective on Guckenberger v. Boston University. *Journal of Learning Disabilities*, 32, 304-319
- Singer, L., & Alexander, P. (2018). Reading of paper and digitally. What de past decades of empirical researche reveal. *Review of Educational Research*, 47(6), 1007-1041.
- Solé, I. (1987). Las posibilidades de un modelo teórico para la enseñanza de la comprensión lectora. *Infancia y Aprendizaje*, 39-40, 1-13
- Solé, I. (1996). *Estrategias de lectura*. ICE.
- Soriano-Ferrer, M., et al. (2019). Dificultades de lectura en niños con Trastorno Específico de Lenguaje. *Revista de Investigación en Logopedia*, 9(1), 1-15.

- Spear-Swerling, L., & Sternberg, R. J. (1996). *Off track: When poor readers become learning disabled*. Westview-Harper Collins.
- Stein, N. L., & Glenn, C. G. (1979). An analysis of story comprehension in elementary school children. in R. V. Freedle (ed.) *New directions in discourse processing*. Ablex.
- Stein, N. L., & Glenn, C. G. (1982). Children's concept of time: The development of a story schema. In W. J. Freedman (Ed.) *The developmental psychology of time* (pp. 255-282). Academic Press.
- Stole, H., & Schwipert, K. (2017). Norske, resultater fra ePIRLS-Online informational reading (Norwegian results from e-PIRL-online informational Reading). In E. Gabrielsen (ed.) *Klar framgang!- Leseferdighet pa 4. og 5 trinn i et femtenars perspetiv* (pp. 50-74). Universitet sforlaget.
- Storch, S., & Whitehurst, G. (2002). Oral language and code-related precursors to reading: Evidence from a longitudinal structural model. *Developmental Psychology*, 38, 934-947.
- Suárez, A., Moreno, J., & Godoy, M. J. (2010). Vocabulario y comprensión lectora: algo más que causa y efecto. *Álabe, Revista de Investigación sobre Lectura y Escritura*. Recuperado de: <http://dx.doi.org/10.15645/Alabe.2010.1.7>
- Terrados López, C. (2020). *Revisión y estudio de políticas educativas para la atención de la dislexia a nivel nacional*. Trabajo Fin de Máster. Máster Universitario en Educación y Sociedad Inclusivas. Universidad de Burgos.
- Tramontana, M. G., et al. (1988). Research on preschool prediction of later academic achievement. A review. *Developmental Review*, 8, 89-14.
- Tressoldi, P.E., et al. (2013). *BVSCO-2. Batteria per la Valutazione della Scrittura e della Competenza Ortografica – 2*. Firenze: Giunti Psychometrics.
- Turner, J., & Paris, S. G. (1995). How literacy tasks influence children's motivation for literacy. *Reading Teacher (Newark, DE)*, 48, 662-73.
- United Nations. (2006). *Convention on the rights of persons with disabilities (CRPD)*. Department of Economic and Social Affairs Disability. Retrieved from: <https://www.un.org/development/desa/disabilities/convention-on->

[the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html](https://unstats.un.org/sdgs/report/2020/the-rights-of-persons-with-disabilities/convention-on-the-rights-of-persons-with-disabilities-2.html)

United Nations. (2020). *The Sustainable Development Goals Report 2020*. <https://unstats.un.org/sdgs/report/2020/>

Van Dijk, T. A. (1977). *Texto y contexto. Semántica y pragmática del discurso*. Cátedra 1980.

Van Dijk, T. A. (1980). *Estructuras y funciones del discurso*. Siglo XXI

Van Dijk, T. A., & Kintsch, W. (1983). *Strategies of discourse comprehension*. Academic Press

Vandermosten, M., et al. (2011). Impairments in speech and nonspeech sound categorization in children with dyslexia are driven by temporal processing difficulties. *Research in Developmental Disabilities, 32*(2), 593-603.

Vaughn, S., & Fuchs, L. S. (2003). Redefining learning disabilities as inadequate response to instruction: The promise and potential problems. *Learning Disabilities Research and Practice, 18*, 137-146.

Vellutino, F. R., & Scanlon, D. M. (1982). Phonological coding, phonological awareness, and reading ability: Evidence from a longitudinal and experimental study. *Merrill-Palmer Quarterly Journal of Developmental Psychology, 33*(3), 321-363.

Werfel, K. L., & Krimm, H. (2017). A preliminary comparison of Reading subtypes in a clinical sample of children with specific language impairment. *Journal of Speech, Language, and Hearing Research, 60*(9), 2680-2696.

Wexler, J., et al. (2008). A synthesis of fluency interventions for secondary struggling readers. *Reading and Writing: An Interdisciplinary Journal, 21*(4), 317- 347.

Wiig, E. H., et al. (2018). *CELF-5: Evaluación clínica de los fundamentos del lenguaje*. Pearson Clinical & Talent Assessment.

Wise, B., et al. (2000). Individual Differences in Gains from Computer- Assisted Remedial Reading. *Journal Experimental Child Psychology, 77*(3), 197-235.

Webs

IDA. [Asociación Internacional de Dislexia]: <http://www.interdys.org/>

UNESCO: <https://en.unesco.org/themes/education2030-sdg4> o
<https://es.unesco.org/themes/liderar-ods-4-educacion-2030>.

UNESDOC: https://unesdoc.unesco.org/ark:/48223/pf0000245656_spa



fordys
VAR

Fostering Inclusive Learning for Children with Dyslexia

ISBN 978-84-18465-19-2



9 788418 465192



Co-funded by the
Erasmus+ Programme
of the European Union



UNIVERSIDAD
DE BURGOS

EM
EUGENIO MEDEA

ASOCIATIA BUCURESTI
pentru
copii cu
DYSLEXIA

AR
SOFT
augmented reality software

Hveloce I+D+i
Tuturile noastre sunt diferite