DYSLEXIA FOR TEACHERS OF ENGLISH AS A FOREIGN LANGUAGE: PROJECTS, TIPS AND TECHNOLOGICAL TOOLS

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Introduction

When definitions of reading have been examined, Dökmen has mentioned two fundamentals on reading skills of high school and university students, namely, reading speed and comprehension (Dökmen, 1990: 395). Reading is defined as a dynamic meaning-making process that requires active and effective communication between readers (Kuru, Kaşkaya, & Calp, 2017: 73 as cited in Akyol). Reading is the comprehension of a written text, reading the known characters with or without sound, feeling in the text and the thoughts (Karatay, 2018: iii). Reading a text by word, a relevant understanding is expected in the mind. Kurudayıoğlu (2015: 15) explains the return of different definitions of reading as the main reason for the act of reading in a complex invisible to the eye. In addition, he made the definition of reading in the most general way as "the act of understanding, comprehending and interpreting written symbols (Avccıoğlu, Kurudayıoğlu, 2015: 16). Pennac (2019) took it further and stated that it is "an act of continuous creation".

As can be understood from the aforementioned definitions, the reason why reading skill is seen as a process can be mentioned. In this context, reading skill is a content issue that includes multiple and different fields. For this reason, it is important to examine the situations in which the reading skill is not developed or have difficulty developing as well as the development of the reading skill because reading has an undeniable place in both daily life and academic life. Also, from a utilitarian perspective, reading is an invitation to enjoy life, as Gonzalez points out (Gonzalez, 2020). What is the situation for those who cannot enjoy this pleasure for some reason and have reading difficulties?

While scanning studies on reading disorders, many unclear and interchangeable concepts were encountered. Some of these are reading difficulties, reading impairments and specific learning difficulties. In fact, there is a concept in the field of psychology that takes place as a specific learning disability. For this reason, it will be tried to provide clarity by including definitions of the concepts related to disorders and difficulties.

Dyslexia, dysorthography, dysgraphia, and dyscalculia form a heterogeneous group of developmental disabilities known as Specific Learning Disabilities (SLD). The main feature of these difficulties is that they are 'specific', that is, they affect a particular range of abilities in a significant but selective way, and the overall intellectual functioning remains intact. Other features of SLD are:

• They are developmental in nature: their neural structures are constantly evolving and specific learning difficulties arise only when a child is subjected to reading, writing and calculating.

• They are expressed differently at different stages of development: specific learning difficulties cannot be cured as there is no disease, but they can be compensated for 'Child disorders are changing disorders in changing people' (Cairella, 1989).

• Almost always associated with each other and / or other difficulties such as language impairment, dyspraxia, attention deficit disorder with or without hyperactivity.

• They are very heterogeneous in their individual appearance and occurrence. In other words, it can manifest differently in each individual.

SLD cannot be attributed or attributed to either a cognitive deficit or a sensory deficit or adverse environmental conditions. These include a discrepancy between reading and / or writing and / or computational performance tests compared to the educational and intellectual level (measure of inconsistency). Therefore, the difficulties that arise are unexpected if one takes into account other aspects of the development of the subject.

While explaining key terms, Field (2004) used the concept of “disorder” under the title of language disorders and made the distinction of all of them clearly. In an organic disorder, when there is a neurological or physiological cause; in function, there are psychological processing problems. Language impairments affect intake, production, or both. Especially in aphasia, the condition can be limited only to receptive aphasia or generative aphasia. In productive disorders, a distinction is made between speech disorders that sometimes affect phonology and language disorders that involve the lexicon and syntax system. However, there is a more appropriate distinction between disorders affecting performance at the phonetic and graphic level and those affecting the underlying system (phonological, graphological, semantic, or syntactic).

Developmental disorder is a disorder that manifests itself during first language acquisition. It can be caused by language processing problems, such as dyslexia and dysgraphia, or it has emotional causes, such as in cases of stuttering. The term also includes the effects on language of learning difficulties associated with Autism, Down's Syndrome, or Williams Syndrome, and cases of delayed language acquisition known as specific language impairment (SLI Specific Language Impairment). In principle, a developmental disorder has three possible effects:

• Delay in the normal language acquisition process.

• May change the order in which elements / items are acquired.

• It may result in a language development different from that observed in normal language development.

The difference between acquired and developmental disorders is sometimes marked by the use of different terms: sample dys- meets a developmental, a- acquired state. Thus, acquired dysphasia of aphasia; alexia's acquired dyslexia. It is understood that agraphi means acquired dysgraphia. For this reason, dyslexia, which is encountered in the literature and is our subject of study, is developmental dyslexia.

1.Dyslexia

It is known that many students at the literacy learning level, that is, at the primary education level, have reading difficulties. In his work titled “Reading Difficulties” in 1982, Razon defined reading as vocalizing written or printed signs by following certain rules. He stated that knowing how to read is to grasp the ideas, feelings and thoughts hidden by a written passage (Razon, 1982: 19). Based on all this, reading is not just an easy way to analyze signs; he saw the whole organism as a running endeavor. Considering that visual and listening functions and mental skills that are activated during reading with the organism are used; It turns out that the act of reading is a complex process (Razon, 1982: 19). The health status, neurological and physiological structure, mental, emotional and social development of an individual who is ready to learn this complex process, and the environmental conditions he / she lives in are of great importance. Effective factors for reading are vision, hearing, intelligence, language development, neurological maturity. Cerebral dominance and lateralization are among the main factors affecting reading learning, general mobility, environmental factors and gender. Considering that any of these factors affect the reading

activity when a problem is experienced, it can be more acceptable how ordinary people who have difficulty in reading actually are.

While the cognitive-processing model was used in the determination and treatment of reading difficulties in the 1980s, the first topic that was discussed was on the definition of dyslexia. The reason for the discussion is that there are different views on the concept of dyslexia. The first description of developmental dyslexia was published in 1896 by the British Doctor W.P. Formulated by Morgan. Morgan defined dyslexia as "congenital word blindness". Since then, many definitions have been given progressively more prominent. Because according to Stanovich (1988) who stated that there are two types of poor readers, weak readers are also divided into two. In the first group, ordinary poor readers with parallel IQ and reading levels are defined; The second group is defined as poor readers whose IQ and reading levels are incompatible. Dyslexia is in the second of these groups because reading performances of such readers are below what their IQ requires (Tracey & Morrow, 2017: 173). Although this contrast is the criterion used in dyslexia diagnoses, Stanovich (2000) revealed that this criterion is an incorrect way to diagnose dyslexia with his research (as cited in Stanovich, Tracey & Morrow, 2017: 174). In the aforementioned study, the most important criterion for the diagnosis of dyslexia was determined as deficiencies in phonological cognitive functions. In other words, phonological competence refers to the individual's awareness and ability of hearing and using sounds within words. He defines dyslexia as a type of learning disability that occurs with literacy learning and arises from deficiencies in other areas of cognitive functions, and emphasizes that behind these deficiencies is a phonological-processing deficiency. According to Altun, Ekiz and Odabaşı, dyslexia is defined as a learning difficulty; reading disability is also a term defined within "special learning disability" (2011: 82).

Dyslexia is a difference in the acquisition of reading, spelling and writing skills of neurological origin, according to the European Dyslexia Association. The cognitive difficulties that cause these differences can also affect organizational skills and computational abilities. It may result from the combination of difficulties of automating phonological processing, working memory, rapid naming, sequencing, and basic skills. Developmental dyslexia is a specific learning disability of neurobiological origin. It manifests itself with difficulties in recognizing correct and/or fluent written words and poor spelling and decoding skills (Lyon, Shaywitz, & Shaywitz, 2003: 2). Various neurobiological studies by scientists around the world have documented the deterioration of nervous systems that transcend languages and cultures for reading in dyslexia (Lyon et al., 2003: 4 as cited in S. Shaywitz).

Zooming of evidence using functional brain imaging of adult dyslexic readers and normal readers showed that the left hemisphere posterior brain systems did not function properly during reading (see Figure 1).

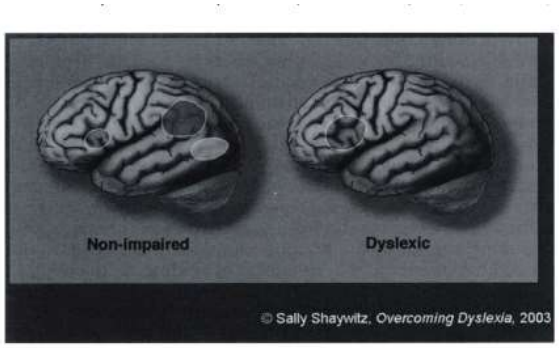


Fig.1: Dyslectic Reader Brain and Normal Reader Brain

1.1. Dyslexia Symptoms

Symptoms that can be observed in dyslectic individuals can be listed as reading disorder, writing disorder, learning disorder - learning disability, comprehension disorder and conflict in the general act process.

• Reading impairment: They have reading difficulties such as reading words backwards, skipping words, skipping syllables, mixing syllables, mixing letters, hesitating.

• Writing disorder (Dysgraphia): When they want to write, it is possible for them to write letters in reverse, to confuse some letters with numbers, in short, to mix similar symbols and use them incorrectly. Example: They may write the letter "E" backwards or use the number "3" instead of "E". Especially lowercase letters "d" and "b", dotted letters and undotted letters are often confused.

• Learning impairment - Learning disabilities: They may not be able to follow simple commands and may have learning difficulties. Example: They can confuse their right and left, and they can wear their shoes inside out. Such situations cause them to fall behind their peers.

• Comprehension: This part is also about attention. Children with dyslexia may have difficulty maintaining attention. It is possible that attention disorder and dyslexia can be observed together. For these reasons, they may encounter problems with comprehension.

• Contradiction: They can perform better than their peers by performing surprisingly in areas such as painting, music and math.

Dyslectic children are children with special abilities. This situation can confuse you; It can lead you to false thoughts such as "doing it willingly". In fact, reading disorder is not related to intelligence. Since dyslexic children have difficulty using the left frontal lobe of the brain, it is not enough to "want". They must be supported. All these symptoms are powerful clues that can be considered as learning disability symptoms. These dyslexia symptoms do not always coexist, or dyslexia is not diagnosed for all such disorders. In order to be diagnosed with dyslexia in a child, there should be no problems at the level of intelligence. In other words, children who are successful in other fields like their peers or who have language (reading, writing, speaking) problems although they are more skillful than their peers can be diagnosed with dyslexia. Diagnosing dyslexia is also the duty of specialist doctors. Therefore, parents who have "Is my child dyslexic?" question in mind should consult their child psychiatrist.

1.2 Difficulties Experienced by Dyslectic Individuals

Judit Kormos, the teacher, researcher and trainer of the dyslexic students who studied the full participation of students in foreign or second language classes, used a running track metaphor to empathize with dyslexic individuals. Imagine putting all the students on the running track, but people with dyslexia have obstacles that only they can see. While dyslectic individuals struggle by getting up and getting caught in obstacles, other students cannot understand why these individuals fell. In this context, these imaginary obstacles experienced by dyslexic individuals are as follows. In real life, we can come across these obstacles in different dimensions.

• Reading - Reading comprehension

• Write

• Spelling

• Attention Time

• Time management

• Editing Skills

• Time Required for Learning Activities

• Self-Confidence and Self-Esteem Problems

• Social Skills and Relationships

• Finger recognition

• Right-left discrimination

• Ranking skills

• Time reading

• Establishing spatial relationships,

Dyslectic individuals are constantly confronted with these problematic areas both in daily life and in academic life. They have problems in understanding instructions, completing learning activities on time, communicating and managing time. These problems do not mean that they will not show high skills in other fields. Although the phenomenon of contradiction, which we encounter as one of the symptoms, sometimes causes problems in both diagnosing and understanding correctly, it is also useful to look at the areas in which they show superior characteristics.

1.3 Strengths of Dyslectic Individuals

Imagine you want a student to bring the map in the right corner ahead of the class, struggling with this simple instruction. However, the same student solves the problem of daily life that the whole class cannot solve, with one glance and a broad perspective, surprisingly quickly. The strengths of dyslectic individuals can be listed as follows:

• Creative

• Visual-spatial skills (3-dimensional thinking)

• To have an effective visual thinking ability

• Seeing the bigger picture from the detail

• Visual arts

• Seeing unexpected connections

• People who can think differently

• People with problem solving skills

• Writing poetry

• Emotional intelligence

• Politics, arts, science, law, business and teaching

In this context, the dyslectic individuals who have used their strengths with the necessary support and instruction and have been very successful today are Steven Spielberg Muhammed Ali, Steve Jobs, Albert Einstein and Thomas Edison. The main feature of these people is that they are not only successful but also rich. In fact, many of the world's self-made millionaires are dyslexic. Most of these people were diagnosed too late or completed most of their lives without getting diagnosed.

So is there a relationship between an individual's mother tongue and dyslexia? Do the child whose mother tongue is Spanish and the child who is Turkish experience the same situations?

• Dyslexia can affect all people, regardless of origin. However, a person's mother tongue can play an important role in being dyslexic or developing in this condition. As Berninger et al. (2008) mentioned, features such as phonation, phonological awareness, orthography of that language and morphological awareness should also be taken into account in determining the mistakes related to the writing and reading process in developmental dyslexia (Berninger et al., As cited in Ay, Bekâr and Ergenç, 2011).

• A language with consistent grammar rules such as Italian and Spanish may be easier for a person with mild to moderate dyslexia because there is a clear connection between how any word is written and its phonetic counterpart in these two languages.

• Languages such as English, where there is no clear connection between the written form and sound, as with the words "cough" and "dough" can be much more difficult for a person with dyslexia. Therefore, the problems faced by a dyslexic patient who speaks Turkish as a mother tongue, which is very difficult to learn, may be more difficult than those who speak other languages.

2. Institutions and Associations

There are institutions such as unions and associations related to dyslexia both at the national and international level. The European Dyslexia Association organizes different events every year in Europe. The annual Autumn Seminars are a way to meet researchers and other dyslexic people from all over Europe to discuss the latest findings on dyslexia. A larger European Dyslexia Conference is held every three years, and there is also a Youth Camp that takes place during the summer months where dyslexic individuals between 18 and 28 can attend. Finally, spreading the Dyslexia Awareness day and week is one of its greatest goals. The conference to be held for the year 2020 will be held on 2-4 October 2020, for example.

Additionally, the British Dyslexia Association (B.D.A.) aims to create a dyslexia friendly society. For this general purpose, B.D.A. works towards the following goals:

1. To create awareness of dyslexia in all segments of society.

2. Identifying dyslexic difficulties early for everyone in the community.

3. To provide effective and appropriate education for all dyslexic children and adults.

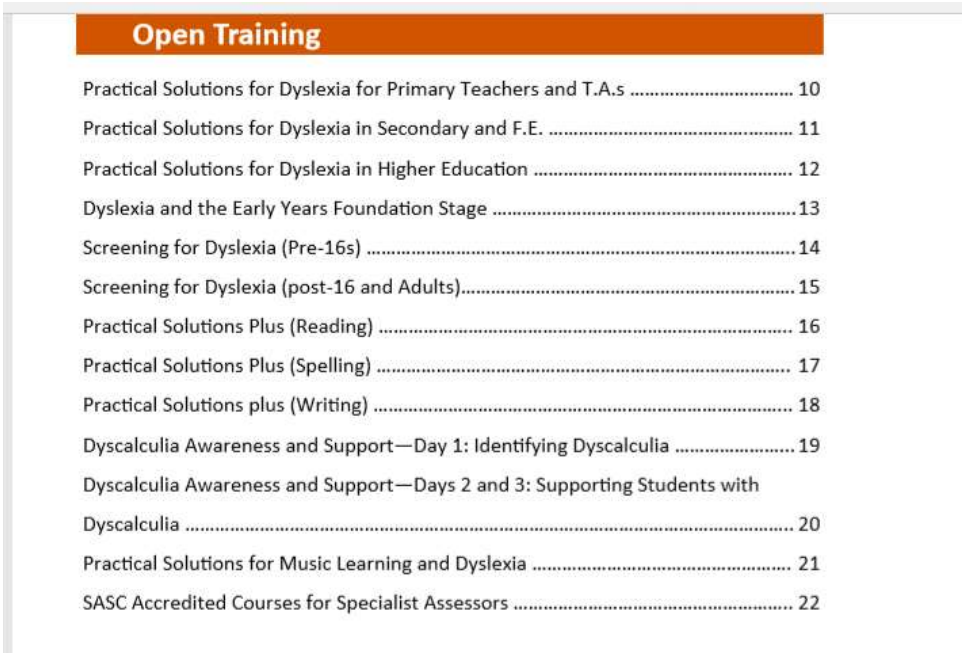
4. Availability of appropriate assessments for all dyslexic children and adults.

5. Reasonable arrangements for dyslexic individuals in all sectors of society (including education, employment, education and criminal justice services).

6. Information should be available for age ranges and individuals with dyslexia in sectors and their supporters, on effective strategies to help overcome the difficulties associated with dyslexia and how to maximize the strengths of dyslexic individuals.

B.D.A.'s educational activities are an important part of the work in the above areas. From early screening training to information for education professionals, to informing employers about how to make reasonable adjustments for dyslexia workers and empowerment strategies for dyslexic individuals, B.D.A. educational activities try to help increase the awareness of dyslexia in all age ranges and sectors of the society. It organizes about 400 training events a year. In addition, the association has prepared a booklet with provisions for open, face-to-face and distance education. This booklet includes information on daily or longer courses on Dyslexia at different levels. As seen in Figure 2, there are both awareness raising and dyslexia courses for different needs. For example, while gaining general awareness, as well as

teaching-oriented practices were included in the daily course prepared for lecturers at higher education level. Thus, those who attend the course will have learned teaching methods and techniques.



Open Training

Practical Solutions for Dyslexia for Primary Teachers and T.A.s 10
Practical Solutions for Dyslexia in Secondary and F.E. 11
Practical Solutions for Dyslexia in Higher Education 12
Dyslexia and the Early Years Foundation Stage 13
Screening for Dyslexia (Pre-16s) 14
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Practical Solutions Plus (Reading) 16
Practical Solutions Plus (Spelling) 17
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Dyscalculia Awareness and Support—Day 1: Identifying Dyscalculia 19
Dyscalculia Awareness and Support—Days 2 and 3: Supporting Students with Dyscalculia 20
Practical Solutions for Music Learning and Dyslexia 21
SASC Accredited Courses for Specialist Assessors 22

Fig.2 .: Daily course content

The International Dyslexia Association was founded in 1949 by Dr. Orton. It was established by the Orton Association on behalf of Orton to serve dyslexic individuals, their families and experts in the field. The association has 42 branches in the USA and Canada and more than 9000 members. Again, in the handbook called Dyslexia in the Classroom Environment prepared by the International Dyslexia Association, teachers are asked about the definition and symptoms of dyslexia. There are clues about the techniques that can be applied in the classroom.

3. Experiences of the Dyslectic Individual

Information was obtained from the students of the Faculty of Engineering at Gazi University School of Foreign Languages through interview questions with the student who is currently studying in the College of Foreign Languages and has Dyslexia. Since formal education could not be continued due to the Covid-19 pandemic, the data were received by email. 4 questions were asked to the student in the form:

1. When and how were you diagnosed with dyslexia? What were your difficulties in primary school? Do you meet other people with the same situation?

2. In what situations or when the conditions are met, can you be successful?

3. What are the other effects of having dyslexia? (Does it have other social, emotional, economic effects?

4. What did you experience while learning English? Under what conditions could learning be easier?

The answers given by the student were as follows.

1. *I was born in Konya on May 2, 2000. My primary school teacher was my mother. I remember the difficulties of my life started in this period. I don't remember having many friends before I started primary school. I could not spend time with my peers. I was with my grandfather in general. I spent time with his friends and I remember having fun. I hadn't noticed anything strange about this until I started primary school. I had a very serious adjustment problem in primary school. My friends would never want to involve me in their games. I remember that while playing the ball, I could never calculate the direction of the ball coming and the distance. When we started learning to read and write, I had extreme difficulty. I was always mixing up letters. I was very successful in mathematics. About 2 years before starting school, my aunt taught things like 4 operations and arithmetic averages. My mother was also very surprised by this inconsistency between my lessons. But since I was a child who never worked at home, my failure in Turkish lessons was hitting my laziness. I remember reading that I never wanted to read anything, it made me dizzy. I noticed my interest in poetry during my primary school years when I was encouraged to read books. Maybe it was tempting to me because it was not difficult to read poetry books. I have had an elementary school life that was not very good in terms of both social and literacy, as you can understand. I was a successful kid when I moved to middle school, but I don't remember studying at all. I couldn't listen much in the lesson. I was subjected to an intelligence test by a teacher who noticed this and found out that I was gifted. My family always thought I was smart, but after learning this I was accused of laziness in every failure I have experienced. Yes, I was not studying, but it was not in my hand, I got bored with everything I did. The lesson was one of them. I have maintained my current performance without working until a certain age. Socially, I changed a lot after primary school and suddenly I turned into a person with a lot of friends when I had no friends. This increasingly continued in high school. I was the head of the school and I was loved by everyone. Even though I stayed away from everything as a kid, this changed in high school. But in the 11th grade, things changed a lot with the stress of the*

exam. My circle of friends consisted of extremely hardworking people. Like them, I wanted to work hard and be more successful. But I could not listen or work. Things got worse in the 12th grade, now I have only one connection with the lesson, and that is a remorse. And at the end of the year, my test score came well below what I had targeted. My friends knew that I was always a little different. I had a friend and he was dyslexic one day, while I was getting into trouble, I told him about my childhood experiences. He said he was very similar to his own experience and referred me to his mother, who was a psychiatrist. During a long conversation with her mother, she was diagnosed with dyslexia and attention deficit and hyperactivity disorder. (the answer to the first question I am sending piece by piece)

2. People with dyslexia are usually people with attention deficit and I am one of them. Since there are too many distractions during the lesson, it cannot be said that I can listen to lessons at school. The environment in which I study should always be very little furnished. I don't really understand when someone says something slowly. I get distracted very quickly. In general, my understanding does not fit well with my classmates. My visual intelligence is stronger than what I listen to, and what I see and touch remain more in my mind.

3. Being dyslexic is sometimes very tiring for me and sometimes it can open many different doors. Sometimes I can look in a way no one else can. But I find it hard to do some jobs that people can do very easily. For example, I learned to tie my laces for a very long time before starting university. I can never write on paper while doing a transaction. I cannot describe directions and many things like that ... I had a lot of emotional difficulties as a child because the children were not very nice to those who were different, but in later years I cannot say that I had much emotional distress.

4. English has always been very important to me. To be honest, I don't have much ability to learn languages. But our English teacher in middle school and high school was foreign. Learning English from native speakers was very useful for me. I am for learning by speaking rather than learning grammar. As a person with dyslexia, I believe it is easier to learn by experiencing everything. I can answer if you have any further questions

note: there may be some disconnection in the sentences due to my focus problems.

In general terms, we can summarize the points that can be taken from the writings of the dyslexic individual is as follows. First of all, we accept that every learner learns differently with dyslexia; it can be seen as a learning style, not a learning disability. Because each

dyslexic individual has unique strengths and different learning styles. Generalization cannot be made. In addition, since the student's writings are conveyed as they are without correction, although they are written on the computer, there are both thought level and grammatical problems. As evidence that they have problems with short-term memory, these problems are encountered as general harmony and order problems in real life. This situation, which Stanovich put forward as the Matthew Effect in Reading and reflects the academic results of dyslexia, is a situation that the student is also exposed to. The problems of children with reading difficulties are initially related to phonological awareness. However, it spreads later, that is, it begins to generalize and spread over time. Because students who have reading difficulties read later and therefore read less. This causes an increase in cognitive difference with other students (as cited in Stanovich, Tracey & Morrow, 2017: 174).

In addition to providing students with a diagnosis of dyslexia for example where Turkey is also seen how important social support is expected. Considering the extent of peer influence at the primary school level, it may be vital to raise the awareness of not only teachers, parents and dyslexic individuals but also other children at school.

4. Studies on Reading Difficulties

In the article, which was examined as a subtype of specific learning disorders, different definitions of dyslexia and dyslexia for dyslexia and the causes of dyslexia were discussed, some of the symptoms that change with age in children with dyslexia were summarized according to grade levels. In addition, short, practical information about classroom management and educational techniques was provided for classroom teachers (Babür, 2018: 67). Observable behavioral characteristics in dyslectic students are listed as phonological awareness (sound awareness), reading aloud, naming speed (automatization), orthographic awareness, working memory, morphological awareness and language development. However, it was emphasized that even if dyslexic children show similarities in terms of their academic difficulties, the degree of these difficulties will be different in each individual.

Bekâr, Ergenç, Ay, and Gürkan (2013) described the “repetition” errors observed in the reading processes of children with dyslexia and healthy children. The mistakes made are as follows:

(1) Word Repeat

child child = "child"

ready ready ready = "ready"

(2) Repetition in the First Voice (s)

so on the street = "on the street"

Bah to those in the garden of the garden = "to those in the garden"

(3) Correction

squeezer seller = "seller"

felt the pill = "felt"

It can be said that the length of the text has an effect between the experimental and control groups.

In the study, which measured whether lexical awareness made a difference between dyslexic students and non-dyslexic students in reading Chinese characters, non-verbal intelligence, Chinese character reading, cognitive linguistics skills and lexical awareness of the 2nd, 4th and 6th grade participants were tested. Results revealed that dyslexic participants showed a later developmental cap than non-dyslexic participants. It has also shown that lexical awareness can be used as a criterion to distinguish children with dyslexia from those without dyslexia at all primary education levels (Li-Chih et al., 2017: 203).

In a study (Rastatter et al., 2007: 266), which investigated the effect of frequency altered feedback on the reading abilities of students with reading difficulties and students who did not have reading difficulties (Rastatter et al., 2007: 266), the participants were given third, sixth and ninth grade materials aloud in two situations (frequency modified feedback and normal conditions). Although no change was observed in participants who had no reading difficulties; it was revealed that the participants with reading difficulties made fewer mistakes under the modified feedback conditions. The development of reading skills in children consists of the coordination of several interrelated but independent sub-processes. Evidence suggests that phonological processing capabilities are essential for word analysis, letter naming, and typographical naming. For this reason, reading disorders should be examined carefully to find

out which sub-process deficiency or inadequacy is caused. When difficult areas are identified, an intervention can be planned for a treatment month that will provide high-level benefits in this plan. It has been observed that changes in auditory feedback have a positive effect on neurobiological functions related to phonological processing and reading skills of children with reading difficulties. For this reason, it became more meaningful that the reading skills of dyslexic students improved with the feedback whose frequency was changed. However, in the study in which the effect of frequency-modified feedback on adults' reading comprehension skills was examined, the frequency-modified feedback had a positive effect on adults with reading difficulties; It has been concluded that it has a harmful effect on normal adults without reading difficulties (Carter, Rastatter, Walker, and O'Brien, 2009: 69).

In another study, the contribution of the 3P (Pause, Prompt, Praise) method and the gap completion (cloze) technique to improve the word recognition and reading skills of a student studying in the fifth grade of primary school, who had reading difficulties. In the study, narrative texts were used as a data collection tool to measure the reading level and reading comprehension skill of the student who was found to have reading difficulties and in activities aimed at improving the reading skill of the student. The frequency of the mistakes made by the student during reading was analyzed with descriptive data and it was observed that the reading level of the student improved from the anxiety level to the instructional level (Dağ, 2010: 65). The 3P method is one of the one-to-one learning programs. It involves a one-to-one operative process with either the teacher, parent or peer. The method has two basic elements. First, the provision of appropriate reading material; the other is the feedback given by the teacher to the student in the form of "hesitation, directing and praising". During the pause phase, the student is given enough time to find the word that is suitable for the context and correct the error.

Technology has of course found its place in studies on dyslexia today, where technology has made great progress. Technological tools have the potential to effectively support learning performance in children and are therefore considered useful for children with special needs such as reading disorders. In this study (Görgen et al., 2020: 2), the effectiveness of a new digital game-based reading education conducted at home during a short education period of eight to eleven weeks in second and third grade children with reading impairment was investigated. The results showed a significant improvement in reading performance for the trained vocabulary material and a trend towards transferring to untrained words. It has also been found that digital game-based reading training is highly motivating and applicable for

use in the home environment. This study expands on existing knowledge about digital game-based reading support and highlights that using a multi-component reading approach combined with flow principles is beneficial for children with reading impairment. In addition, the program evaluated appears to be a promising support for children who do not have access to individual reading support.

Learning Disabilities 'often under the name' Attention Deficit and Hyperactivity Disorder which accompanied the 'developmental dyslexia', as all around the world, is a developmental disorder which is very common in Turkey. Dyslexia is the most common learning disability, according to University of Michigan Health department experts. In fact, 80 percent of students with learning difficulties have dyslexia. The International Dyslexia Association estimates that 15 to 20 percent of the US population has some dyslexic symptoms, such as slow or incorrect reading, bad spelling, poor writing, or mixing similar words. In Turkey, Ankara 2nd and 4th grade students in developmental dyslexia rates in studies of investigated a total of 1129 children in the classrooms of subjects (514 female, 615 male) occurring within the student population, 34 (3%), one reading troubled child was found. 8 (1.6%) of them are girls and 26 (4.2%) are boys (Bingöl, 2003: 75).

As Bekar et al. (2013) also stated, dyslexia is not related to mental deficiency / retardation. "Developmental Dyslexia", defined as a neurologically based learning disorder, is a problem that can only be overcome by the development of awareness of those who are both learners and instructors in the education process. Since it is a very common developmental disorder, it is thought that it is very important for individuals who are educators to develop awareness on this issue, both for the early diagnosis of children with this disorder and for the children who have been diagnosed to develop learning strategies.

5.Reading Difficulties and Their Reflections on Foreign Language Teaching

They have specific learning difficulties diagnosed as dyslexic individuals in Turkey, may be exempt from foreign language courses if they wish. However, this does not mean that dyslexic individuals cannot learn a foreign language. Considering the studies conducted with dyslectic individuals, it is a fact that they can learn more than one foreign language (Yurttabir, 2019: 103).

The first case was the DYSLANG project; Turkey was a partner as well, which started to be implemented in 2012-2013. The project was carried out by the European Union within the scope of Lifelong Learning. The studies carried out with the countries of Bulgaria, Czech Republic, Italy, Switzerland, England and Wales aim to support the dyslexic individual in learning an additional curriculum language. In this project, both local and other general studies were carried out for partner countries and module-booklets were published as products.

The statements of a student learning a foreign language with this project are as follows:

"*I'm a 21-year-old dyslexic hedonist. Before I wrote this article to you, I designed it from my mind many times, but since I could not collect any of these designs in a proper text, it took time to write and send it. To explain more, although I have many thoughts that I would like to write down, they all keep turning in my mind. "I can't control my thoughts". There is a little experiment I have done to compare myself with those around me. I tell my friends to think of a straight line in their mind. Although my friends had no difficulty in doing this, I could not succeed at all. I always had difficulties in explaining myself, being motivated, writing, and programming. Although I had the same difficulty studying, I had no difficulty learning English or Japanese; The foreign materials I watched (anime, manga series, cartoons) allowed me to learn more with less difficulty, as they made these languages pass through my mind without forcing me. Besides, although it was difficult to control what I was thinking, it was quite easy to control how I was thinking. Even if it's a word, I slowly translated my mind first to English and then to Japanese. When I first started learning Japanese, I was thinking in three languages. Currently, I do not feel any difference between thinking in Turkish, English or Japanese* (Yurttabir 2019: 104 as cited in Özel).

The same project shared sample lesson plans and included more specific techniques. For example, in the lesson plan prepared to raise phonological and orthographic awareness, by giving lists of English sounds; service has been made according to the rules (See. Appendix-1).

DYSLANG, also supported by the European Union Commission, started with the belief that dyslexic students would not show academic progress without the necessary intervention. It is another project owned by the British Dyslexia Association. Supporting multilingual dyslexic individuals was considered difficult due to the multiplicity of individual linguistic backgrounds and the apparent complexity of the identification process. However, over time,

the importance of the approach that is important in solving this problem has emerged to support the difficulties faced by the child rather than the source of the problem. This shift in paradigm has revealed the potential to provide appropriate intervention and support without labeling. The aim of the Dyslang project is to develop and implement a distance learning course and to support multilingual dyslexic individuals in learning an additional curriculum language by preparing a guide for teachers and parents.

This is not just a situation experienced by foreign language teachers. In a study whose objectives were to determine reading difficulties the teachers encounter and what they do to resolve these difficulties. The data were collected with 10 classroom teachers in the 3 provinces in the northeastern Turkey' via semi-structured interviews According to the results of the research, it was determined that classroom teachers faced with many reading difficulties and applied various practices to overcome them. It has been determined that teachers consider their practices partially effective but do not see themselves fully sufficient (Altun, Durmuş & Odabaşi, 2011: 96). In this context, when referring to the classroom teaching curriculum, the content of the 4th term “Teaching Turkish” lesson on reading difficulties includes “Modern methods and techniques that can be used in teaching Turkish; improving reading, writing, listening, speaking, visual reading and presentation, comprehension skills; diagnosis and elimination of reading difficulties; structure of reading texts; teaching informative and narrative texts, intertextual reading and writing; making meaning from texts, questions about texts and their types; developing critical thinking through reading and writing; speed reading and techniques; main idea teaching and methods; purposes, types and rules of reading; evaluation of reading, writing, listening, speaking and understanding; examination of the primary school Turkish curriculum, its relationship with other lessons, sample activity applications related to the program." has been included. Within the scope of curriculum development studies, the "Special Education" course can be added to the program to raise awareness especially for teachers in primary education.

Some approaches and techniques that can be used in the context of Foreign Language Teaching will be mentioned below:

5.1 Orton-Gillingham Approach and Techniques

The approach is named after Samuel Torrey Orton and Anna Gillingham. Samuel Torrey Orton is an American doctor who pioneered learning disability studies. He studied the causes and treatment of dyslexia. Context suggestions were helpful for all those who had difficulties.

Anna Gillingham is an educator and psychologist known for her contributions to the Orton-Gillingham method for teaching children with dyslexia to read. The Orton-Gillingham Approach is a direct, clear, multidimensional, structured, sequential, diagnostic, and prescriptive way of teaching literacy while reading, writing, and spelling. It is understood and applied as an approach, not as a method, program or system. Its most basic feature is that it has a multisensory approach.

● International Professional Association Dr. It was founded in the name of Orton because he is one of the pioneers in reading difficulties.

● There are many institutions around the world that apply this approach.



Figure.1: Vocabulary Cards

a. Visual exercise - word cards: These cards are rich content cards where letters are presented together with images. For example, he introduces the -U-sound as the first sound of the word umbrella and the umbrella image is seen in the corner of the card.

b. Sensory exercise-sand tray: Letters can be practiced by finger on the tray with sand inside. With the activation of different senses by touching, it offers a multi-sensory environment for dyslexic individuals. These trays, which are also used by the Montessori approach, can also be prepared with lentils and rice so that they can be prepared at home.

c. Blending exercise: Blending involves blending different senses with each other. Like writing by listening, writing by touching.

d. Concentrated Sounds: It is the study of problematic or target sounds within a certain plan. It is realized by studying the same sounds in a concentrated way.

5.2 Spelling (Spelling) Teaching

This technique, taken from the examples prepared by a mother whose dyslectic child goes to primary school for her child's development on a whiteboard in the morning, can also be

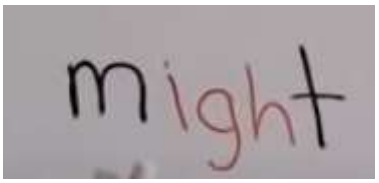
applied at the classroom level. First, a target sound is determined and then the target sound is focused on. While doing this concentration, both color and visual usage were provided. For example, when teaching the “-igh-” sound in English, words containing the sound are written with the target part in red and the remaining letters are written with a black pen. The word is visualized in blue to create a picture in the student's mind. In the first example, the word “light”, which contains the sound of “igh”, is associated with lightbulb and the following image appears.



and


Figure 2 & 3: Spelling Teaching Samples

As the second example, the same process is followed for the word “might” in the noun form. Therefore, again, the target sound is visualized with red, others black and again with a blue pen.



and


Figure 4 & 5: Spelling Teaching Samples2



Figure 6: Complex Word Spelling Examples

In the case of more complex words, since the word “night” is taught first, it is combined so that the visual of this word remains constant.



Figure 7: Complex Word Spelling Examples

As seen in Figure 7, w-ee-k eeler is written in red for the word "weeknight". In fact, it is not the target here, but the previously learned word is written in red for purpose again. It can be mentioned here that the consistency between words and images is as important as the use of visuals, because following the same pattern also provides convenience for dyslectic individuals. In addition, long words can be learned more easily by dividing them into parts. (See Appendix-1 for more examples)

This technique may not always be applicable for every word, but in case of difficulties, clipart or images on the internet can be used to give an idea.

In general, the basic principle in the techniques of dyslexic individuals is to associate words with visuals and to employ more than one sense. Although these techniques are difficult to prepare and time-consuming, they are vitally important in terms of helping dyslexic individuals. As a teacher of the course, it can be considered and used as a technique to be prepared for different learning styles. The important thing is to be able to find facilitating ways without focusing on the problem by tagging.

6. Special Ways to be Used in Teaching Foreign Language to Dyslectic Individuals

There are special ways to teach foreign languages to students diagnosed with Dyslexia, which is defined under special learning difficulties. Some of these are as follows:

- Using technological tools (such as computer, CD player),
- Simplifying the written instruction,

 Providing little information, tasks, instructions at once,

 Blocking distracting stimuli,

 Highlighting only the important parts,

 Providing additional, supportive exercises,

 Preparing a guide for reading,

 Instruction repetition.

In fact, these ways, which are similar to general principles, can be used both in the acquisition of dyslexic individuals and in effective teaching of a foreign language.

7. Technology and Dyslexia

Of course, developing and changing learning tools thanks to the developing technology are also customized and used for dyslexia. There are websites and applications that can be used for different skills and challenges. For example, with Time Timer, a time keeping application that can be used in regulation, it can help dyslexic individuals with both visual time depiction and audible stimuli. Again, with the MindMeister site, dyslexic individuals can create, view and edit mind maps with the online mind mapping tool that enables visual capture, development and sharing of ideas. Can be used for brainstorming, note taking, project planning and many other creative tasks, MindMeister is completely web-based, meaning no downloads and updates. With Popplet, online mind maps can be created that will help dyslexic students organize their thoughts and structure the basics of texts such as essays and letters. In addition to editing skills, we can list the technological tools to be used in literacy-spelling as follows: Storykit, Pocket Phonics, First Words Deluxe, See Read Say, ABC Spelling Magic 1, ABC Spelling Magic 2, ABC Spelling Magic 3, ABC Spelling Magic 4. Dyslectic students can also be supported through Spy Sam Reading Series, Sentence Maker, Learn to Read, Write and Spell, Clicker Books (from Crick software) and many other software, websites and applications (See Annex.2). For example, Storykit is a multimedia storytelling mobile application. It allows its users to create electronic storybooks and share them with others. They can illustrate by creating a story and drawing on the screen, taking a picture of something they saw or drawing on paper, and then photographing the paper or adding photos from their album. Storykit is a practical tool for teachers who can use it to create their own storytelling books and share them with their students. All of them are free

and anyone can use them easily. Storykit is compatible with iPod touch, iPhone touch and iPad. In this context, editing, reading, writing, vocabulary learning, phonological awareness auxiliary applications; speech-to-text or text-to-speech transfer tools; it is possible to access the sites to access videos and songs. (See Appendix-3 for updated useful site, software and application list).

Conclusion

Reading difficulties, which are considered within the scope of learning difficulties, which are referred to with concepts such as disorder, difficulty, and disability, affect children in the literacy learning process. Since the difficulty is experienced differently in each individual, it is named as specific learning disability. Considering the prevalence of dyslexia as one of the reading difficulties both at the primary school level and in the society, it is of great importance to know the symptoms for its diagnosis. Although it varies from person to person, it can be listed as reading disorder, writing disorder, learning disorder - learning disability, comprehension disorder and conflict in the general act process. The problem that is meant by contradiction in this section is that the individual has a high level of success in certain skills while having problems in other areas. This is because the reading and writing problems observed in dyslexia are associated with laziness or unwillingness. Because dyslexic individuals are creative, visual-spatial skills (3-dimensional thinking, having an effective visual thinking ability, seeing the big picture from detail, visual arts, seeing unexpected connections, people who can think differently, people with problem solving skills, writing poetry, emotional They are highly skilled in the fields of intelligence, politics, arts, science, law, business and teaching, in this context, it is very important for dyslexic individuals to gain awareness as both parents and teachers.

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APPENDIX-1: SAMPLE LESSON PLAN









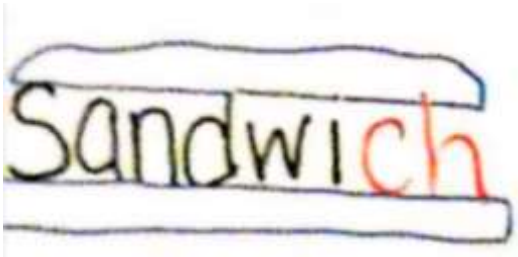
APPENDIX-2: Teaching Spelling Examples

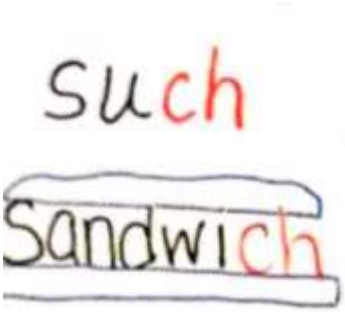




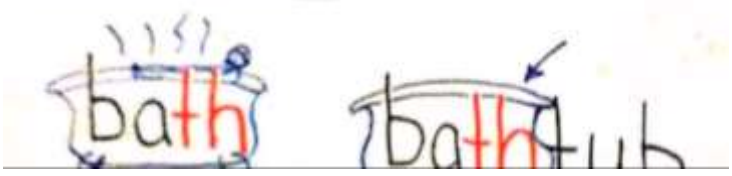


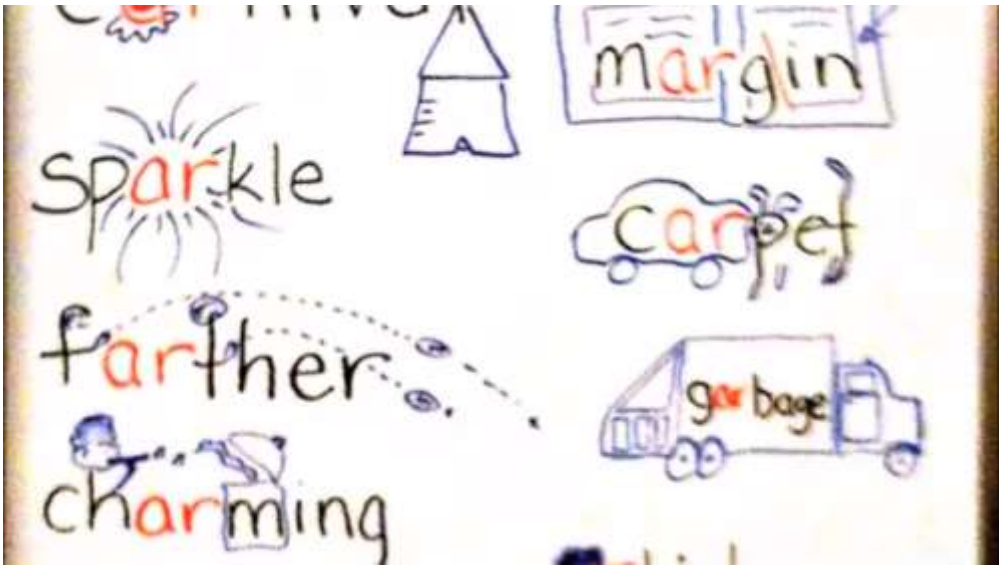











margin
sparkle
carpet
farther
garbage
charming

APPENDIX-3 Technological Tools, Softwares and Websites

WEBSITES, APPS SUITABLE FOR STUDENTS WITH DYSLEXIA – 2020		
Type/Title	**Description (descriptions adapted from apps' websites)**	**Links**
ORGANIZATION		
Time Timer	Time tracking app. Time management with a visual depiction of time, also audible signals.	https://www.tsheets.com/pages/app-twopart?utm_source=Bing&utm_medium=pay-per-click&utm_campaign=Clock_In_Out_RLSA&utm_term=best%20app%20for%20clocking%20in%20and%20out&utm_content=Clock_In_App&msclkid=67401a6a3839181cc7624601e974a72a
MindMeister	Online mind mapping tool that lets you capture, develop and share ideas visually. Create, view and edit mind maps. For brainstorming, note taking, project planning and tons of other creative tasks. MindMeister is completely web-based, which means there's no download and no updating!	https://www.mindmeister.com/?utm_source=bing&utm_medium=cpc&utm_campaign=world_en_search&utm_content=mm&msclkid=d5d02665022d142865a27a0ed3e12a77&utm_term=mindmeister
Popplet	You can create mind maps online that can help dyslexic students organize their thoughts or structure the foundation of essays, letters etc.	www.popplet.com
READING/WRITING/SPELLING		
StoryKit	Storykit is a multimedia storytelling mobile app. It allows its users to create electronic storybooks and share them with others. Create a story and illustrate by drawing on the screen, taking a photograph of something you see, or drawing on paper and then photographing the paper, or attaching photos from your album. Storykit is a practical tool for teachers who can use it to create their own storytelling books and share them with their students. It is all free and anyone can use it easily. Storykit is compatible with iPod touch, iPhone touch, and iPad.	https://www.educatorstechnology.com/2011/05/storykit-free-mobile-multimedia.html

	own grids and texts with a range of features. It is available as an app and as software, too.	
British Council – Learn English Teens	Teaches how to write a story.	http://bit.ly/LETeensStory2 http://bit.ly/LETeensStory1
First step reading	It is for young students under 12. online video lessons, mainly songs to teach young students to read through practicing sounds, phonics and blending.	www.firststepreading.com
Reading A-Z	Thousands of downloadable, projectable, printable teachers' materials, covering all the skills necessary for effective reading instruction.	https://www.readinga-z.com/
Make Beliefs Comix	Website for creating comics.	http://www.makebeliefscomix.com/comix/
Teach your monster to read	The groundbreaking game that makes learning to read fun • Covers everything from letters and sounds to reading full sentences. • Designed in collaboration with leading academics. • Complements all synthetic phonics programmes used in schools. • Computer version is 100% free.	www.teachyourmonstertoread.com
Wikipanion	Access Wikipedia with an online dictionary from any word in the article. It is the best and fastest Wikipedia browsing application for iOS. Can be used when reading books online and facing unfamiliar words.	http://www.wikipanion.net/
Vocabulary Spelling City	Teaching, learning spelling, phonics and vocabulary through games and activities.	www.spellingcity.com
Newsela	Digital reading experiences supercharge reading engagement and learning in every subject. Teachers at PRO schools and districts get access to dedicated Newsela specialists and can unlock a variety of Professional Learning resources to effectively implement Newsela PRO and drive learning.	https://newsela.com/
Dvolver movie maker	Tool to practice writing. Students can make a short "movie" choosing among different characters, backgrounds and movements, than they have to write the dialogue. At the end you will see your "movie" as a cartoon with balloon dialogues.	http://www.dvolver.com/moviemaker/make.html
VOCABULARY LEARNING		

Pocket Phonics	The Pocket Phonics Stories application is a program to teach students (4 to 7 year-olds) to read using phonics. It is designed to be used with individual or multiple students and is great for classroom or group use.	https://www.educationalappstore.com/app/pocketphonics-stories
First Words Deluxe	Reading game for kids, phonics. First Words Deluxe provides endless fun for the toddlers, giving the child a head start on learning their letters and learning to spell words.	https://www.commonsensemedia.org/app-reviews/first-words-deluxe
See Read Say	Did you know before children finish first grade, they should be able to read all the Dolch sight words? This list of 220 words, prepared by E.W. Dolch, generally made up from 50 to 75 percent of the reading material encountered by students. These words are generally known as Dolch words, high-frequency words, or "sight words".	https://appadvice.com/app/see-read-say/322313775
ABC Spelling Magic 1	Teaches the sounds of the letters, helps your child learn the sounds of the alphabet and how to build words. This app indirectly teaches the essential reading skill of segmenting as well. Two levels of challenge are available.	https://sites.google.com/site/interactwithmyboard/ipad-apps-and-apptivities/language-development-apps/abcspellingmagic123 https://appadvice.com/app/abc-spelling-magic-4/598794973
ABC Spelling Magic-2	This level focuses on teaching consonant blends.	
ABC Spelling Magic 3	Gives the opportunity to practice building 4-7 letter words that contain two or more syllables.	
ABC Spelling Magic 4	This app will help children gain mastery with words that contain silent final e.	
Spy Sam Reading Series	This multi-book adventure starts with a few simple words on each page. Gradually the simplistic cartoon façade falls away to reveal a thought-provoking plot that champions loyalty and determination. You can download 3 books.	http://www.spysam.com/
Sentence Maker	It is a simple sentence-forming app that can help kids learn the basics of word pairing and sentence structure. This app can be helpful for kids who have difficulty with spoken and written expression.	https://www.commonsensemedia.org/app-reviews/sentence-maker
Learn to Read, Write and Spell	Teaches young users foundational literacy skills.	https://appedreview.com/app/learn-to-read-write-and-spell-2/
Clicker Books (from Crick software)	Supporting writing and reading for learners of English, French & Spanish. Images and sound are incorporated into texts. Teachers and learners can create their	https://appadvice.com/app/clicker-books/645936237