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Developmental dyslexia intervention framework for speech therapists

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Resumen

Este artículo tiene como objetivo proporcionar un marco de referencia para logopedas sobre la intervención psicoeducativa de la dislexia evolutiva. En primer lugar, se recogen los principales aspectos que debe incluir la intervención individual realizada por el logopeda, como son la mejora de la fluidez lectora, de las habilidades fonológicas y, en la mayoría de las ocasiones, de la comprensión lectora. Es fundamental que exista una relación de colaboración entre el logopeda y el maestro para que el niño consiga superar esta dificultad de aprendizaje, por ello, además de dicha intervención individual, el papel del logopeda también consiste en ofrecer orientaciones para la intervención en el aula. Por ello, en segundo lugar, se presentan algunas recomendaciones que puede proporcionar a los maestros de niños que presentan esta dificultad de aprendizaje. Entre ellas, se recogen algunas adaptaciones que se pueden realizar en las tareas académicas diarias y en los exámenes, así como también la intervención en los aspectos emocionales afectados, como puede ser la autoestima.

Palabras clave: Dificultades de aprendizaje; Dislexia; Fluidez lectora; Intervención logopédica.

Abstract

The aim of this paper is to provide an intervention framework for speech therapists for developmental dyslexia in an educational environment. Firstly, there is a list of the main aspects which should be included in the individual intervention, such as reading fluency, phonological abilities and, in most cases, reading comprehension. The collaboration between teacher and speech therapist is essential in order for the child to overcome this learning difficulty. In this sense, in addition to the individual intervention, the speech therapist's role also includes offering orientations for the intervention in the classroom. For this reason, secondly, this article presents some recommendations which the speech therapist can give to the teacher who has students with this learning disability. Among them, there are included some adaptations which can be carried out whilst doing daily tasks and for exams, as well as the intervention for emotional aspects which may be affected, such as self-esteem.

Keywords: Dyslexia; Intervention strategies; Learning disabilities; Reading fluency.

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Introduction

Sara is an intelligent, loving and outgoing girl. She loves talking and so, she can describe to you in detail what she has just done or her plans for the weekend. Above all, Sara loves solving puzzles and the more pieces it has, the more fun it is for her. However, she is not enthusiastic about school at all. Sara only enjoyed it when she attended kindergarten. But since then, every year at school is worse than the previous one. She hates school and her teacher is always complaining about her reading and spelling. She often gets discouraged and thinks she is not as smart as other children. She does not understand why it is so hard for her to read fluently and write without making mistakes. Sometimes she wonders why her achievement is so good in some areas of her life and so poor in others. What Sara's parents and teachers have not yet realized is that Sara has dyslexia.

One of the most accepted definitions of dyslexia is proposed by the International Dyslexia Association: "Dyslexia is a specific learning disability characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge" (International Dyslexia Association, 2002). The prevalence of dyslexia has been estimated to be around 4-18% of the population depending on the language, definition and the cut-off set (Nag & Snowling, 2012). Due to this high frequency, it is important to provide research-based interventions to practitioners in order to foster the literacy acquisition process of these struggling readers.

Importance of an early detection for an early intervention

In the case of dyslexia, as in any learning disability, the early detection, and thus early intervention, increases the effectiveness of any treatment. Dyslexia is heritable (up to 50% of children with dyslexia have parents with dyslexia), which provides opportunity for early identification if a child has affected older sibling or parents (Shaywitz & Shaywitz, 2003). For that reason, it is essential to pay special attention to children who are "at risk" on the basis of familial background (at least an immediate relative with a diagnosis of dyslexia).

The Jyväskylä Longitudinal Study of Dyslexia has studied language and cognitive predictors of reading and spelling difficulties by the comparison between children with and without relatives with dyslexia (Lyytinen, Erskine, Ahonen, Aro, Eklund & Guttorm, 2008). In this study, the best cognitive predictors were phonological awareness, rapid automatized naming, and letter knowledge assessed at 3.5 years of age (Lyytinen *et al.*, 2008). Therefore, these skills are excellent early signs of potential difficulties in learning to read and write; if a child has poor performance during preschool in tasks such as counting and/or blending sounds, rhyming words, naming letters, the sounds of letters and recognizing letters will be necessary to adopt measures for an adequate response as soon as possible. Moreover, it is essential to pay special attention to children whose parents or siblings have dyslexia.

One of the approaches based in the early detection of reading difficulties is the Response to Intervention (RTI) model. RTI is an instructional framework that focuses on the early identification of students at risk for poor learning outcomes and provides early support and evidence-based intervention for struggling students (Hughes & Dexter, 2011). It is an alternative to the IQ-discrepancy model for identifying students with learning disabilities because the basic concept of RTI is that when an effective intervention is provided, a child can respond or not adequately to that intervention and such information can be used to guide the instruction. In this model, students no longer have to «wait to fail» to receive the

intervention, it may prevent the identification of students for special needs, and assessments that help educators plan instruction (Jiménez, 2012; O´Connor, Fulmer, Harty & Bell, 2005; Wixson & Valencia, 2011). The reading interventions are strongly tied to research-based practice in phonemic awareness, letter knowledge, fluency, vocabulary and comprehension.

The implementation of RTI has three successively intensive phases or tiers of empirically based instruction/intervention (Hughes & Dexter, 2011; Vaughn & Fuchs, 2003). During Tier 1, all students are assessed and monitored in terms of their response to regular classroom instruction. Monitoring of children performance is critical in Tier 1 and occurs several times per year. In Tier 2, those students who do not respond to class wide intervention are exposed to group additional reading instruction. This tier is provided to about 20% of students of the classroom. The Tier 3 is provided to students whose performance and rate progress continues to lag behind their peers included in Tier 2 (usually between 3-5% of students) and the third tier provides intensive and individualized intervention.

Individual intervention for children with dyslexia

One characteristic of dyslexia is its heterogeneity, that is, each child with this learning disability will potentially manifest a different profile and range of difficulties. Thus, some children with dyslexia might have problems primarily with accuracy, with many phoneme-grapheme substitutions, omission and/or inversion errors when reading, whereas others might only have problems in their reading rate (Jiménez-Fernández, Defior & Serrano, 2012). Consequently, the difficulties profile will be very important in determining the intervention approach as children with dyslexia should require individual and customized intervention based on the deficits that have been identified in their assessment.

However, following the National Reading Panel (2000), there are some basic and common elements that any reading intervention program must include to help the

improvement of child´s reading. These effective interventions basically encompass decoding (accuracy and speed), phonological skills and, in some cases, reading comprehension.

Decoding

The main characteristic of children with dyslexia is a low accuracy and/or speed in word recognition. One important procedure is decoding that act as a self-teaching mechanism (Share, 1995). Therefore, one of the aims of the intervention is to help the child acquire automation to apply Grapheme-Phoneme Correspondences Rules (GPCR), which is essential to achieve reading speed.

There are several methods to facilitate and support the learning of GPCR. One of them is the *multisensory teaching approach* where each phoneme is taught through the use of different sensory modalities (visual, auditory, kinaesthesic-tactile, and even olfactory). It starts with working the visual and auditory modalities. The practitioner shows a card with a letter and says its name and sound. Then, learning is supported through the use of other modalities such as kinaesthetic-tactile, for example, the child has to do activities like mould plasticine letters, trace them with their fingers and/or form syllables or words with tangible letters as Figure 1 shows (for further information, see Phillips & Kelly, 2011). An important thing to note is that the teaching aim should not only be isolated letters but also groups of them, for example, teaching the spelling of frequent suffixes as *-ing,-ally, -fully* or *-ation* (Nunes & Bryant, 2006).

This type of intervention is especially helpful in increasing reading accuracy but does not always help improving speed (Kuhn & Stahl, 2003). Fluency refers to the ability to read orally with speed, accuracy, and proper expression and it implies the automation of the decoding processes to free cognitive resources to be used for higher order processes such as comprehension.

Figure 1. Working with plastic letter to improve GPCR learning.

To achieve automation it is necessary to conduct massive practice; "reading is reading is reading" as expressed by Cossu, Rossini & Marshall (1993). One way to provide massive practice is through *repeated reading* (Rashotte & Torgesen, 1985; Rasinski, 1990). Hudson, Lane & Pullen (2005) pointed out this method is one of the best ways to develop reading. It consists of reading short paragraphs repeatedly until reaching a certain level of fluency. Then, an equivalent text is presented to achieve widespread progress. It has been found that this method not only improves decoding but also increases reading comprehension. Following Rasinski (2006), the aim of repeated reading should be meaningful and prosodic interpretation of the text, not only faster reading.

However, there is a limitation related to a lack of motivation as the child reads the text repeatedly. In order to overcome this limitation, it is recommended that the practitioner uses texts related to the child's interests (e.g.: cars, films or videogames) and include different techniques to express the child's improvements, such as graphs; for example, Figure 2 shows the decrease of the time spent to read three texts (A, B and C) when the child reads them two and three times.

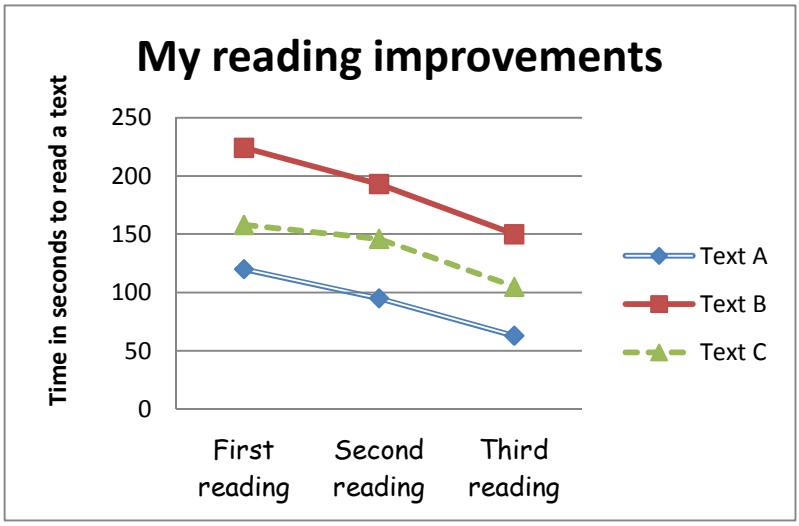

Figure 2. Example of the use of graphs to represent the improvement in repeated reading method.

Another method to improve reading fluency is *Reading in Shadow* or *Guided Reading* that is a type of repeated reading. It consists of reading a text several times aloud jointly and simultaneously by the practitioner and the child (Bus, 2001; National Reading Panel, 2000; Shaywitz & Shaywitz, 2003). Initially, the practitioner starts to read aloud slightly faster than a child would normally do. Once the adult has read five or six words, the child begins to read, trying to do it at the same speed as the adult and imitating the intonation. At the same time, the practitioner is also able to correct the child´s mistakes immediately, at the time they are made. This strategy can be also used with parents or other peers.

To complement the decoding intervention, it is essential to include activities relating to the second word recognition procedure as direct recognition based on the orthographic representation of words. This whole-word approach is especially useful in children with surface dyslexia. It consists of the repeated presentation of complete words with their corresponding meanings along with some clues which can facilitate vocabulary learning. One way to work this approach is the technique called "*words box*". Every time the child makes an error with a word (s)he should make a card that includes that word with other useful

information (such as its meaning or similar words and so on) and place the card inside the "words box". For example, Figure 3 shows a card made for a child who wrote "grate" instead of "great". At the end of each week the child should review all the words that have been included in the box and remove those that (s)he can read and write properly (e.g.: when the child makes a spelling task without errors). The practitioner will review all the words removed often (e.g.: two months) to strengthen the learning of the words.

Figure 3. Card example for *words box* technique.

Phonological skills

Phonological awareness is the ability to detect and manipulate phonemes (speech sounds) in spoken syllables and words and, as it is well-known, is one of the major contributors to reading acquisition (Caravolas et al, 2012; Castles & Coltheart, 2004; Smith, Walker & Yellin, 2004; Swan & Goswami, 1997; Yopp & Yopp, 2000). Because of this importance, any dyslexia intervention must include phonological awareness activities.

Some examples of phonological awareness are to detect rhyme and alliteration, identify words that start/end with the same sounds, segment words into smaller units such as syllables and sounds by counting them, blend separated sounds into words, or manipulating sounds in words by adding, deleting, or substituting (see types of phonological tasks in Defior, 1996).

The effectiveness of these activities increases when it is accompanied with other intervention strategies relating to GPCR (e.g. Cardoso-Martins, Mesquita & Ehri, 2011), for example, using plastic letters (Defior & Tudela, 1994).

Recently, research has also highlighted other phonological abilities beyond the segmental level, namely suprasegmental phonology (see review in Magne & Brock, 2012). Children with dyslexia show deficits also on prosodic processing (Jiménez-Fernández, Gutiérrez-Palma & Defior, 2014). Suprasegmental phonology extends to units and features beyond one single phoneme, and it is primarily concerned with the overarching patterns of the speech stream, such as the prosodic features of stress, timing, and intonation (Dowhower, 1991). In this regard, recent studies have shown the effectiveness of intervention programs based on timing and rhythmic entrainment in reading fluency (Bhide, Power & Goswami, 2013; Degé & Schwarzer, 2011; Taub & Lazarus, 2013; Thomson, Leong & Goswami, 2013). In light of these recent results, practitioner should include prosodic activities in the intervention of children with dyslexia, as well as musical activities. For example, tapping along to a metronome at different tempos, differentiating between two rhythms, detecting the stressed syllable in a word, chanting and playing hand clap games, etc. (Bhide, Power & Goswami, 2013).

Reading comprehension

The primary problems in dyslexia are at word level; however, most children with dyslexia show difficulties in understanding what they are reading. These comprehension difficulties are secondary because a slow, demanding and deficient word recognition skills make such high demands on the reader´s mental resources that have as a consequence a lack of comprehension (Høien & Lundberg, 2000; Ransby & Swanson, 2003; Shankweiler et al., 1999). Moreover, the reading comprehension ability may be affected by other factors

impaired in population with dyslexia, such as working memory (Gathercole, Alloway, Willis & Adams, 2006) or morphological processing (Lázaro, Schreuder & Aceituno, 2011; Lyytinen & Lyytinen, 2004).

To compensate for these difficulties, the practitioner should also include different types of activities relating to reading comprehension processes (Watson, Gable, Gear & Hughes, 2012), mainly focusing in higher level language skills (Snowling & Hulme, 2011), such as finding the main idea and summarization (see review in Berkeley, Scruggs & Mastropieri, 2010), improving inferences generation (McNamara, 2012), increasing the level of prior knowledge and oral vocabulary (see example of activity in Feezell, 2012), using self-monitoring questions (see review in Joseph & Eveleigh, 2011), and improving morphological processing (Traficante, 2012 and see reviews in Bowers, Kirby & Deacon, 2010; Goodwin & Ahn, 2010).

Classroom intervention: Recommendations for teachers

To ensure the progress of children with dyslexia, the intervention approach must be characterized by the coordination between the speech therapist and the teachers at the school. However, sometimes the teachers do not have specific knowledge about the classroom intervention of dyslexia and, in this case, the speech therapist should offer some guidelines (Castejón & España, 2004). In addition to the above recommendations, next are some general guidelines which the speech therapist can recommend to the teacher in order to implement them in class. These guidelines are based on scientific literature, our own experience, and the review by Román-Lapuente (2008).

The support in the classroom begins by understanding the learning disability, so that the child knows that the teacher and their peers understand their difficulties and acknowledge that it's not due to a low capacity, lack of motivation or laziness. Teachers should express to

the student that they are there to help her/him and should encourage the child to ask questions whenever the child needs to. The teacher should explicitly appreciate the extra effort that is involved in reading and other academic activities and should express that the child can certainly achieve the same objectives as the whole group.

Specifically, the written language instruction should be structured, systematic, cumulative, sequential, intensive, explicit, and multisensory (Eden & Moats, 2002; Henry, 2009; IDA, 2000; Shaywitz, 2003). Structured and systematic instruction requires that the organization and presentation of material follows the logical order which fits the nature of the alphabetic principle; teaching must begin with the easiest and most basic GPCR (e.g.: vowels and consonant such as "s", "m") and progress methodically to more difficult material (e.g.: consonant cluster such as "tr-" or "bl-"). Each GPCR must be based on those already learned and GPCR taught must be systematically reviewed. All GPCR must be introduced in a cumulative and sequential manner so that one builds upon another. The instruction must be intensive with daily practice and explicit because children with dyslexia have evidenced deficits in implicit learning (Jiménez-Fernández, Vaquero, Defior & Jiménez, 2010), therefore all correspondences between graphemes and phonemes must be explicitly taught. Finally, it must be multisensory because teaching has to incorporate a simultaneous use of all learning pathways (auditory, visual, kinesthetic, tactile) during teacher presentations and student practice.

With regard to the daily activities in the classroom, it is important to highlight that these children need more time than their peers to complete tasks and are also likely to be easily distracted because reading involves a greater cognitive load. In order to minimize these difficulties, the teacher should frequently change the academic tasks, particularly for tasks with a high phonological demand (such as a dictation task).

It is recommended that teachers avoid having the child copy the statements of the activities from the textbook or blackboard. It´s better if the teacher gives the child a sheet with all the information, thus the child can devote their resources to solving the task rather than copying.

Also, it is important that teachers consider the influence of the reading disability on other subjects like science or math. For example, if a child has problems in reading comprehension the teacher can expect difficulties in understanding a statement in a verbal arithmetic problem as well. There is another frequent characteristic of dyslexia which may appear during daily activities that is not very well known. Performance of the child with dyslexia fluctuates, that is, there are moments when these children can show a near average reading, however, the next day, when they have to read a similar text, they make a lot of mistakes and/or read very slowly. This irregularity in their performance leads one to think that these children have a lack of motivation or involvement in the task (Ryan, 2004). Therefore, it is very important that the teacher knows, understands and takes into account that these changes are another sign of the child's learning difficulties.

As much as possible, the teacher should try to reduce the amount of homework in order for the child to have time to receive specialised help for their problems as well as have time for other, more motivating activities as playing sports, dancing, playing an instrument, etc. that, moreover, are an indirect way of rhythmic entrainment .

Regarding the academic assessment of the children with dyslexia, teachers need to take into account what was well expressed by Albert Einstein: "*Everyone is a genius. But if you judge a fish on its ability to climb a tree, it will live its whole life believing it is stupid*"

Therefore, when assessing school achievement, the teacher should take into account that it should be multicomponent, that is, the final score should not be based only on written tests (exams) but it should also be complemented by oral examinations, work done in class

with available materials, oral presentations of the content of the textbook or monographic works made individually or in groups, among other things. Other suggestions for academic assessment of children with dyslexia are:

-To avoid giving homework the day before the test in order to allow the child to focus on preparing for the test.

-To provide more time to complete the test or include fewer questions.

-To include different kinds of questions in the exam, for instance, true/false and multiple choice questions.

-To stimulate their self-assessment, for example, suggesting an exam review before delivering it.

-To use different methods to evaluate spelling learning such as completing sentences with the target words.

-To include two marks on each test; one of them to reflect the content and another that reflects the errors related to spelling (sometimes the teacher can consider disregarding some of the spelling errors).

The intervention should go beyond the academic aspects and also take into consideration emotional support because children with dyslexia often have problems with self-esteem, loss of confidence or anxiety. The teacher, and also the speech therapist, should try to emphasize the positive aspects of the children's work both individually and publicly. To do this, try to promote activities which are likely to be successful either because of a high level of motivation or because it is one of their strengths (e.g. oral presentations, manipulative tasks, etc.). At the same time, the teacher can reduce the chances the child has to fail, even more so in public. For example, it is advisable that the teacher try to avoid

having the child read aloud in the classroom (unless a text has been previously worked on individually at home or in class).

Finally, it is important to highlight that collaboration with the child's parents is essential to achieve adequate progress of a child with dyslexia. Speech therapist and teachers have a very important role as mediators with the families. They should begin by providing the family with information about what dyslexia is, its main manifestations and the consequences associated with it. Also, practitioners should convey that dyslexia is a lifelong condition (Hudson, High & Al Otaiba, 2007) and this learning disability is not a problem to be resolved quickly (on the contrary, it can be presented throughout the entire academic life) but the collaboration among speech therapist, family and school can help compensate for the child's difficulties.

To conclude, the individual intervention carried out by the speech therapist with a child who has dyslexia should include a series of essential aspects that evidence-based research makes available nowadays. Nevertheless, the cooperation with the teacher and parents plays a very important role in helping to compensate for the difficulties of the child with dyslexia, both in the academic and emotional domains. Because of this, the speech therapist, as well as implementing evidence based individual intervention, has to provide orientations about the intervention which the teacher could carry out in the classroom and parents at home. Only cooperation between professionals and parents will allow the child with dyslexia to overcome his/her difficulties.

References

Berkeley, S., Scruggs, T. E., & Mastropieri, M. A. (2010). Reading comprehension instruction for students with learning disabilities, 1995-2006: A Meta-Analysis. *Remedial and Special Education*, *31*, 423-436.

Bhide, A., Power, A., & Goswami, U. (2013). A rhythmic musical intervention for poor readers: A comparison of efficacy with a letter-based intervention. Mind, Brain, and Education, 7, 113-123.

Bowers, P. N., Kirby, J. R., & Deacon, S. H. (2010). The effects of morphological instruction on literacy skills a systematic review of the literature. *Review of Educational Research*, *80*, 144-179.

Bus, A. G. (2001). Joint caregiver-child storybook reading: A route to literacy development. In S. B. Neuman & D. K. Dickinson (Eds.), *Handbook of early literacy research*, (pp.179-191). New York: Guilford Press.

Cardoso-Martins, C., Mesquita, T. C. L., & Ehri, L. (2011). Letter names and phonological awareness help children to learn letter–sound relations. *Journal of Experimental Child Psychology*, *109*, 25-38.

Castejón, L. A., & España, Y. (2004). La colaboración logopeda-maestro: hacia un modelo inclusivo de intervención en las dificultades del lenguaje. *Revista de Logopedia, Foniatría y Audiología*, *24*, 55-66.

Castles, A., & Coltheart, M. (2004). Is there a causal link from phonological awareness to success in learning to read? *Cognition, 91*, 77-111.

Cossu, G., Rossini, F., & Marshall, J.C. (1993). Reading is reading is reading. *Cognition, 48*, 297-303.

Defior, S. (1996). Una clasificación de las tareas utilizadas en la evaluación de las habilidades fonológicas y algunas ideas para su mejora. *Infancia y Aprendizaje*, *19*, 49-63.

Defior, S., & Tudela, P. (1994). Effect of phonological training on reading and writing acquisition. *Reading and Writing*, *6*, 299-320.

Degé, F., & Schwarzer, G. (2011). The effect of a music program on phonological awareness in preschoolers. *Frontiers in Psychology*, *2*, 124.

Dowhower, S. L. (1991). Speaking of prosody: Fluency's unattended bedfellow. *Theory into Practice*, *30*, 165-175.

Eden, G. F., & Moats, L. (2002). The role of neuroscience in the remediation of students with dyslexia. *Nature Neuroscience*, *5*, 1080-1084.

Feezell, G. (2012). Robust vocabulary instruction in a readers ´workshop. *The Reading Teacher, 66*, 233-237.

Gathercole, S. E., Alloway, T. P., Willis, C., & Adams, A. M. (2006). Working memory in children with reading disabilities. *Journal of experimental child psychology*, *93*, 265-281.

Goodwin, A. P., & Ahn, S. (2010). A meta-analysis of morphological interventions: Effects on literacy achievement of children with literacy difficulties. *Annals of Dyslexia*, *60*, 183-208.

Henry, M. K. (2009). *Multisensory structured language teaching.* Baltimore, MD: The International Dyslexia Association.

Høien, T., & Lundberg, I. (2000). Dyslexia and reading comprehension. In T. Høien, & I. Lundberg (Eds.), *Dyslexia: From Theory to Intervention* (pp. 101-113). Springer: Netherlands.

Hudson, R.F., High, L., & Al Otaiba, S. (2007). Dyslexia and the brain: What does current research tell us? *The Reading Teacher, 60*, 506-515. doi: 10.1598/RT.60.6.1

Hudson, R.F., Lane, H.B., & Pullen, P.C. (2005). Reading fluency assessment and instruction: What, why, and how? *The Reading Teacher*, *58*, 702–714.

Hughes, C. A., & Dexter, D. D. (2011). Response to intervention: A research-based summary. *Theory into Practice*, *50*, 4-11.

International Dyslexia Association (2002). *What is dyslexia? Definition of dyslexia adopted by the IDA board of directors.* Retrieved January 12, 2013 from http://www.interdys.org/ewebeditpro5/upload/Definition.pdf.

International Dyslexia Association (2000). *Clinical Studies of Multisensory Structured Language Education for Students with Dyslexia and Related Disorders.* Retrieved January 17, 2014 from http://www.interdys.org/ewebeditpro5/upload/OGBasedandMSLApproaches.pdf

Jiménez, J. E. (2012). Retos y prospectiva de la atención al alumnado con dificultades específicas de aprendizaje: hacia un modelo basado en la respuesta a la intervención. In Navarro, J; Fernández, Mª.Tª; Soto, F.J. y Tortosa F. (Coords.), *Respuestas flexibles en contextos educativos diversos.* Murcia: Consejería de Educación, Formación y Empleo.

Jiménez-Fernández, G., Defior, S. & Serrano, F. (2012). Perfiles de dificultad en la dislexia evolutiva: lectura imprecisa vs lectura no fluida. In AA.VV. *Libro de actas del XXVIII Congreso International AELFA* (pp.538-545). Madrid: Asociación Española de Logopedia, Foniatría y Audiología.

Jiménez-Fernández, G., Gutiérrez-Palma, N., & Defior, S. (2014). *Prosodic abilities in Spanish children with developmental dyslexia.* Poster presented in 9th International Conference British Dyslexia Association, Guildford (UK).

Jiménez-Fernández, G., Vaquero, J. M., Jiménez, L., & Defior, S. (2011). Dyslexic children show deficits in implicit sequence learning, but not in explicit sequence learning or contextual cueing. *Annals of Dyslexia*, *61*, 85-110.

Joseph, L. M., & Eveleigh, E. L. (2011). A review of the effects of self-monitoring on reading performance of students with disabilities. *The Journal of Special Education*, *45*, 43-53.

Kuhn, M.R., & Stahl, S.A. (2003). Fluency: A review of developmental and remedial practices. *Journal of Educational Psychology, 95*, 3-21.

Lázaro, M., Schreuder, R., & Aceituno, V. (2011). The processing of morphology in children with and without reading disabilities. *Revista de Investigación en Logopedia*, *1*, 76-86.

Lyytinen, H., Erskine, J., Ahonen, T., Aro, M., Eklund, K., & Guttorm, T. (2008). Early identification and prevention of dyslexia: Results from a prospective follow-up study of children at familial risk for dyslexia. In G. Reid, A. Fawcett, F. Manis & L. Siegel (Eds.), *The SAGE Handbook of Dyslexia* (pp. 121-146). London: Sage.

Lyytinen, P., & Lyytinen, H. (2004). Growth and predictive relations of vocabulary and inflectional morphology in children with and without familial risk for dyslexia. *Applied Psycholinguistics*, *25*, 397-411.

Magne, C., & Brock, M. (2012). Reading acquisition and phonological awareness: Beyond the segmental level. *American Journal Neuroscience, 3*, 10-16.

McNamara, D. S. (Ed.). (2012). *Reading comprehension strategies: Theories, interventions, and technologies*. Psychology Press.

Nag, S., & Snowling, M.J. (2012). School underachievement and specific learning difficulties. In Rey J.M (Ed.), *IACAPAP e-Textbook of Child and Adolescent Mental Health*. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions.

National Reading Panel (2000). *Teaching children to read: An evidence-based assessment of the scientific research literature on reading and its implications for reading instruction.* Washington, DC: US Government Printing Office.

Nunes, T., & Bryant, P. (2006). *Improving literacy by teaching morphemes*. Routledge: New York.

O'Connor, R.E., Fulmer, D., Harty, K.R., & Bell, K.M. (2005). Layers of reading intervention in kindergarten through third grade: Changes in teaching and student outcomes. *Journal of Learning Disabilities*, *38*, 440-455.

Phillips, S., & Kelly, K. (2011). *Teaching literacy to learners with dyslexia: A Multi-sensory approach*. London: Sage Publications Limited.

Ransby, M. J., & Swanson, H. L. (2003). Reading comprehension skills of young adults with childhood diagnoses of dyslexia. *Journal of Learning Disabilities*, *36*, 538-555.

Rashotte, C., & Torgesen, J. (1985). Repeated reading and reading fluency in learning disabled children. *Reading Research Quarterly*, *20*, 180-188.

Rasinski, T. (2006). Reading fluency instruction: Moving beyond accuracy, automaticity, and prosody. *The Reading Teacher*, *59*, 704-706.

Rasinski, T.V. (1990). Effects of repeated reading and listening-while-reading on reading fluency. *Journal of Educational Research, 83*, 147-150.

Román-Lapuente, F. (2008). *Actualización en dislexia del desarrollo. Guía para orientadores y profesores de Primaria.* Murcia: Consejería de Educación, Ciencia e Investigación.

Ryan, M. (2004). *Social and emotional problems related to dyslexia.* Baltimore, MD: The International Dyslexia Association.

Shankweiler, D., Lundquist, E., Katz, L., Stuebing, K. K., Fletcher, J. M., Brady, S., et al (1999). Comprehension and decoding: Patterns of association in children with reading difficulties. *Scientific Studies of Reading*, *3*, 69-94.

Shaywitz, S. E. (2003). Overcoming dyslexia: A new and complete science-based program for reading problems at any level. New York: Knopf.

Shaywitz, S. E., & Shaywitz, B. A. (2003). Dyslexia (specific reading disability). *Pediatrics in Review*, *24*, 147-153.

Smith, M., Walker, B. J., & Yellin, D. (2004). From phonological awareness to fluency in each lesson. *The Reading Teacher, 58*, 302-307.

Swan, D., & Goswami, U. (1997). Phonological awareness deficits in developmental dyslexia and the phonological representations hypothesis. *Journal of Experimental Child Psychology, 66,* 18-41.

Taub, G. E., & Lazarus, P. J. (2013). The effects of training in timing and rhythm on reading achievement. *Contemporary Issues in Education Research*, *5*, 343-350.

Thomson, J. M., Leong, V., & Goswami, U. (2013). Auditory processing interventions and developmental dyslexia: a comparison of phonemic and rhythmic approaches. *Reading and Writing*, *26*, 139-161.

Traficante, D. (2012). From graphemes to morphemes: An alternative way to improve skills in children with dyslexia. *Revista de Investigación en Logopedia*, *2*, 163-185.

Vaughn, S., & Fuchs, L. S. (2003). Redefining learning disabilities as inadequate response to instruction: The promise and the potential problems. *Learning Disabilities Research & Practice, 13*, 137-146.

Watson, S., Gable, R., Gear, S., & Hughes, K. (2012). Evidence-based strategies for improving the reading comprehension of students: Implications for students with Learning Disabilities. *Learning Disabilities Research & Practice, 27*, 79-89.

Wixson, K.K., & Valencia, S.W. (2011). Assessment in RTI: What teachers and specialists need to know. *The Reading Teacher, 64*, 446-469.

Yopp, H. K., & Yopp, R. H. (2000). Supporting phonemic awareness development in the classroom. *The Reading Teacher, 54*, 130-143.