

Educational Interactions Between Teachers
And Elementary School Students With
Developmental Language Disorders: A Systematic Review*

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Abstract

The study is a systematic review aimed at identifying and analyzing current research on educational interactions between teachers and primary school students with language development disorders during 2016-2022 using the PRISMA Declaration for the search in Scielo and Web of Science and Scopus according to inclusion criteria to answer the question What are the current findings in research on educational interactions between teachers and primary school students with language development disorders?. The 19 articles selected from 126 indicate that there is a better interaction between peers than with other agents of the school community. Likewise, the teacher must support the academic, social/interactive, emotional and vocational progress of students with language development disorders.

Keywords: educational interactions, developmental language disorders, specific language disorders, primary education, literature review.

Resumen

El estudio es una revisión sistemática orientada a identificar y analizar la investigación vigente sobre las interacciones educativas entre docentes y estudiantes de primaria con trastornos del desarrollo del lenguaje durante 2016-2022 utilizando la Declaración PRISMA para la búsqueda en Scielo y Web of Science y Scopus según criterios de inclusión para responder la pregunta ¿Cuáles son los hallazgos vigentes en la investigación sobre interacciones educativas entre docentes y estudiantes de primaria con trastornos del desarrollo del lenguaje?. Los 19 artículos seleccionados de 126 indican que existe una mejor interacción entre pares que con otros agentes de la comunidad escolar. Asimismo, el docente debe apoyar el progreso académico, social/interactivo, emocional y vocacional del estudiantado con trastornos del desarrollo del lenguaje.

Palabras clave: interacciones educativas, trastornos del desarrollo del lenguaje, trastornos específicos del lenguaje, educación primaria, revisión de la literatura.

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Introduction

Interaction is defined as the observable relationship between the teacher and his students, which implies a mode of educational participation of each of these in the classroom mediated by language. Research on interaction already has a tradition that goes back to more than fifty years of studies (Mercer and Dawes, 2014); For the purposes of this systematic review, we will focus on teaching in primary school, without focusing attention on any particular discipline of the curriculum since, as Jeong (2005) warns, there is consensus regarding the relevance of investigating educational interactions and how to build a framework around targeted behavior, student contributions, culture, language, and emotions (Battey & Hunsdon, 2018).

According to Freire (1991), teaching is not transferring knowledge, but creating the possibilities of its construction. For his part, Shulman (1987) argues that being a teacher requires organized bodies or layers of knowledge. Rowland and Zazkis (2013) warn of the need for studies on the teacher's body of knowledge in attention to the core: the integrity that is expressed in educational interactions at the time of teaching.

Despite the above, it is common for teachers, when teaching, to show problems managing adequate strategies in the classroom (Rodríguez et al, 2016), perceive difficulties in developing motivating classes (CIDE, 2012), make good use of the classroom time (Martinic and Villalta, 2015), plan and evaluate their practices (Mineduc, 2017) or diversify their educational interactions (Quality Agency, 2018). In addition to this, recent studies have explored the relationship between the teaching career and educational interactions (Badilla, Saldivia and Vega, 2016; Cárdenas 2020).

Other studies on teaching practice and interaction in the classroom (Fonseca, 2011; Sánchez, 2012) indicate that school learning would depend mainly on the type of interaction established between the teacher and the student. This process of interaction that the teacher generates in the students highlights, from scientific evidence, an important category "dialogical-reflexive participation" (Álvarez, 2012). This offers indications of a little studied aspect around the dialogic-reflexive component (Yang and Carless, 2013).

In this sense, what enables the best performance of students in their learning from the perception of their teachers is found in the dialogic relationship: the educational interactions that teachers establish with their students, therefore, would have a direct impact on learning. (Garet et al, 2001; Ingvarson, 2005).

This component of interaction involves not only cognitive aspects, but also emotional and relational ones. The results in terms of learning depend on the meaningful educational interactions that the teacher and students bring and what each one evokes in the other's thinking (Coskun, Bostan and Rowland, 2020). As Álvarez (2012) points out, the teacher generates in the students the need to acquire an understanding of what is taking place in the classroom and confront that with their own beliefs, knowledge, skills and/or attitudes through two types of interaction: those that they allowed the student to become aware of what they do not know and need to know and those that generated a cognitive conflict between what the student thought they knew and knowledge that contradicted those beliefs.

For their part, Medina and Jarauta (2013) found in some of their studies, how teachers, during the interaction, went beyond their own understanding of the subject to capture how the student was inadequately understanding some topic of the field object of their study. Explanation. The knowledge that sustained that competence could not be solely the disciplinary domain. The

teachers observed were able to appreciate in situ the degree of relevance of the students' contributions.

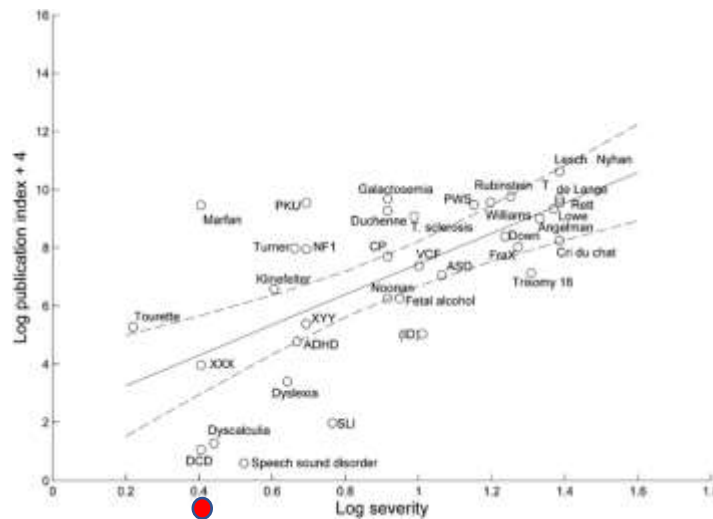
The educational environments, and with them the classrooms, are diverse and heterogeneous, which implies that teachers move towards the constitution of interactive and innovative educational environments that allow a transformation in the teaching and learning processes (Ainscow et al., 2008; Choose to educate, 2020). These classroom-based learning environments must ensure learning for all children (Starling et al., 2012), environments that will benefit from increased knowledge and awareness of teachers about the pedagogical needs of children, about all those with vulnerable language, which makes it important to make teachers aware of both language development and language development disorder (hereinafter DLD) in boys and girls who are also part of these classrooms (Bishop et al., 2012; Dockrell et al., 2015; Starling et al., 2012).

Many wonder how we have failed children with DLD in the educational setting (Bishop, 2010; McGregor, 2020), placing their arguments of more than 2 decades of neglect of the needs of these minors, even when the evidence is clear in pointing out that language skills, both oral and written, are of great importance in both learning and teaching. Boys and girls with developmental language disorder (Bishop et al., 2017) are at high risk for learning difficulties, especially when the demands on oral and written language skills increase.

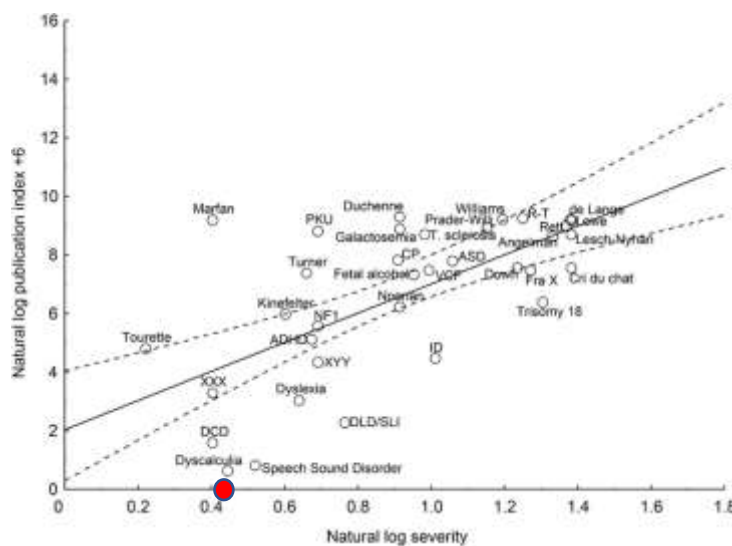
As a scope, and for a better understanding of DLD, the focus of this systematic review together with educational interaction, it is necessary to point out that children with DLD predominantly have difficulties in production (phonology, vocabulary and grammar), while others they also have difficulties with understanding language. In cases where language comprehension is involved, the prognosis is worse (Bishop & Edmundson, 1987; Durkin & Conti-Ramsden, 2010; Zambrana et al., 2014). It is well known that DLD during the school years often persists and has direct implications for the learning process; in many cases with a lifelong perspective, although symptoms often change during the early school years (Glogowska et al., 2006; Stothard et al., 1998).

The data provided by the following graphed investigations are worrying and even more so if we reduce the search field for DLD only to the educational field, excluding clinical studies.

Graph 1. Shows the publication index 2000-2009 (Bishop, 2010). In red SLI, an acronym for Specific Language Disorders, prior to its nomenclature change to DLD, an acronym for Developmental Language Disorders. The graph shows a production of scientific articles of 0.13 per 100 cases.



Graph 2. Using the same method (Bishop, 2010), the graph shows the 2010-2019 publication rate in the United States and the United Kingdom (MacGregor, 2020). The production of scientific articles is 0.03 in the USA and 0.16 in the UK for every 100 cases.



Teachers' use of language must be within reach so that children can process the language they hear. Therefore, teachers need not only subject-specific knowledge and language and communication skills, but also awareness of the child's proximal zone of development, in order to interact through the "scaffolding" process (Vygotsky, 1978).

Although the national legislation sets standards and determines forms for attention to diversity (Supreme Decree No. 170, 2009) and sets guidelines, in addition to pedagogical and disciplinary guidelines for such attention (Supreme Decree No. 83, 2015), to address the awareness of DLD in teachers (and other transitional educational needs), researchers, and professionals in the field have initiated campaigns such as RADLD (Increasing Awareness of Developmental Language Disorder (Bishop et al., 2012)).

These campaigns highlight the general implications for research and point to the need for a better understanding of how children's and young people's needs impact teaching, learning and peer-to-peer interactions in the classroom. with him or the teacher (Quality Agency, 2018a) and, therefore, for the development of effective interventions to address the challenges that boys and girls experience, for which awareness of what is happening in the classroom is required, as well as as in processes of specific interactions (Dockrell et al., 2014).

In this regard, Cabell et al. (2015) analyzed the quality of conversations between teachers and children in preschool and primary classrooms and found that the use of elicitations (fluid transfer of information from one human being to another through language) and explicit extensions by teachers was associated with vocabulary growth in children. For their part, King and Dockrell (2016) explored different types of conversations in a daycare center. They found examples of both more natural (informal) conversations and more formal conversations that are characteristic of later language use in school.

A combination of the two types of conversations (informal and formal) offers transition support and can increase a child's awareness of using language in different contexts. Furthermore, Dockrell et al. (2015) point out the importance of supporting the communication skills of children in the school environment to improve their language production and comprehension skills. This combination must be mediated by the teacher in processes of interaction between peers and with the teacher, validating the genuine contributions of the student, becoming aware of the incidence of teacher interactions in the reception of students, which has repercussions on their emotions, motivations and learning.

Therefore, this systematic review situated in the framework of the link between the interactions of primary teachers and their students with DLD aims to systematically identify and analyze the findings on educational interactions between primary teachers and students with developmental disorders. of language through the review of the specialized literature in the period 2016-2022, asking what are the current findings present in the specialized literature on educational interactions between teachers and primary students with language development disorders?

Methodology

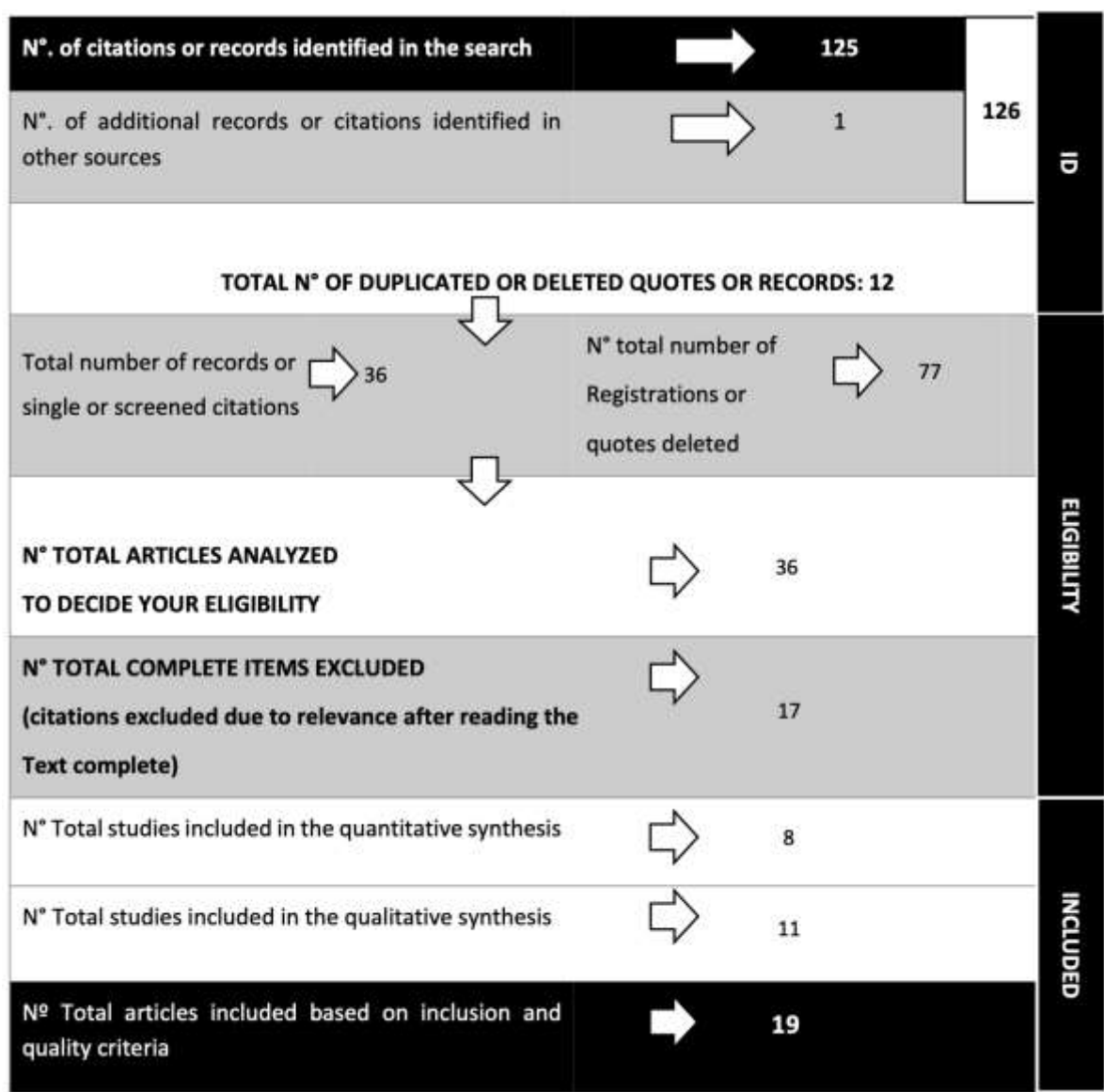
The information search was carried out in May/June, 2022 of articles published during the 2020-2022 period, following the PRISMA declaration guide for reporting systematic reviews and meta-analyses (Urrutia and Bonfill, 2010). Searches were made in the Scopus and Web of Science databases, then it was extended to other databases such as ERIC and the use of the ERIC Thesaurus with the purpose of finding conceptual representations and semantic approximations with other concepts, thereby improving the patterns of search.

In these first searches carried out, the following strategies were used: Educational interactions, pedagogical interactions, classroom interactions, teaching practice in the classroom Specific language disorders, language development disorders, primary education. Also included were searches for DLD (for its acronym in English for Developmental Language Disorders) AND SLI (for its acronym in English for Specific Language Disorders), AND classroom interactions with students with DLD, teaching for DLD, teaching for DLD, students with DLD in regular classroom. Filters by year and educational level and Boolean operators were applied.

Table 1. Inclusion and exclusion criteria applied in the literature search.

Inclusion criteria	Exclusion criteria
1. Empirical studies.	1. Books.
2. Studies in the field of educational sciences, special education and pedagogy.	2. Clinical studies
3. Systematic reviews.	3. Informative documents.
4. Studies in primary education.	4. Studies at other educational levels (K12)
5. Studies in English or Spanish.	5. Different studies on teachers or students with DLD (diagnosis, clinical intervention, etc).
6. Studies between 2016-2021.	6. Studies prior to 2016.

Figure 1. Summary flow chart of the search and review process.



Preliminary analysis of selected articles

The review procedure consisted of first reading the summaries of each selected article to determine their relevance, then relevant information was extracted to integrate into a base table of preliminary information. This extracted information allowed a first approach to the observation of the articles and to identify the variety of concepts; For this reason, three main axes were established: INTERACTION (educational/pedagogical), DLD

(primary school students with language development disorders and TEACHING (in primary education.)

The next level of information extraction, referring to the results, analysis and discussions from each article, was carried out through a thematic analysis of open coding, central coding and, finally, a phase of interpretation and reflection of all the information generated (Hernández, Fernandez and Baptista, 2010). With all the data, excel tables were created with a summary of methods and relevant key questions for each of the selected articles and thus build the final review report.

ATLAS.ti22 was used to regroup the information according to the three main axes: group or family of codes (categorization), codes (sub-categorization) and accompanying citation fragments as evidence. With this, an axial or semantic map was designed.

Results

Figure 2. Semantic map

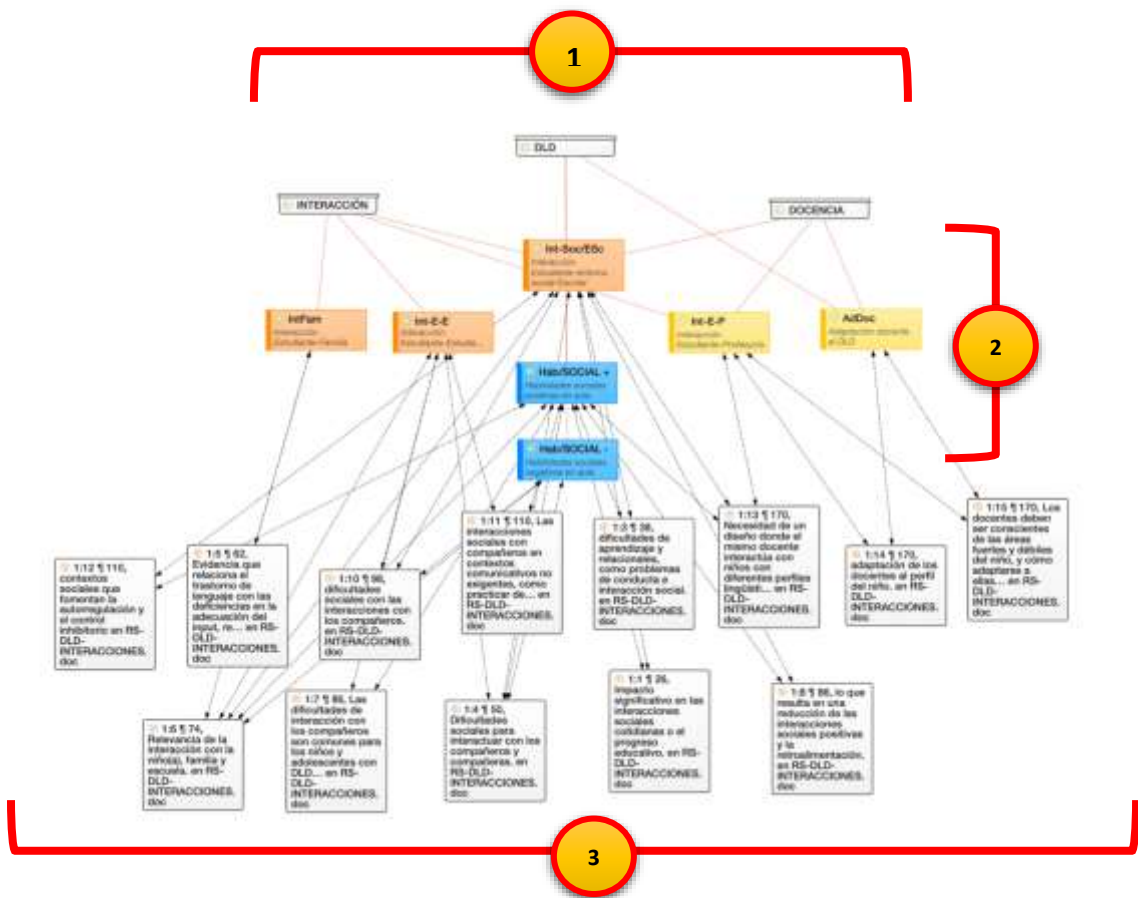


Table 2. Semantic Map Specifications Table

TABLE OF SPECIFICATIONS SEMANTIC MAP		
Segment 1	Groups or families of codes (categorization)	Cluster 1: INTERACCIÓN/ INTERACTION
		Cluster 2: DLD/ Language Development Disorders
		Cluster 3: DOCENCIA/ TEACHING
Segment 2	Codes (sub-categorization)	Cluster 1: • Int-E-E (student-student interaction) • Int-E-P (student-teacher interaction) • Int-Soc/ESc (Interaction Student-social environment-School) • IntFam (student-family interaction)
		Cluster 2: • AdDoc (Adaptación pedagógica/disciplinar docente al DLD) • Hab/SOCIAL + (Habilidades sociales positivas en aula). • Hab/SOCIAL - (Habilidades sociales negativas en aula).
		Cluster 3: • AdDoc (Teaching pedagogical/disciplinary adaptation to DLD) • Int-E-P (student-teacher interaction) • Int-Soc/ESc (Interaction Student-social environment-School)
Segment 3	Citations (excerpts from selected articles)	

Analysis and preliminary discussion

To start, it is necessary to mention that most of the works on educational interactions approach their object of study through theoretical approaches and methodological tools that are used interchangeably in disciplinary fields associated with the social sciences, specifically the educational field, special education and pedagogy. No reference will be made to clinical studies since this field was assigned to exclusion according to the criteria of this systematic review.

From a total of 126 selected articles and through the use of the 27-item checklist, the flowchart and the inclusion/exclusion criteria assumed for this systematic review under the strict criteria of the PRISMA Declaration (Urrutia and Bonfill, 2010), a total of 19 selected articles were reached.

Regarding the units of analysis, a synthesis of 3 large groups of codes or categories and 8 codes or sub-categories was produced, through the use of Atlas.ti22, which are in co-occurrence, allowing the concomitance of one or several of them on different occasions, this according to the analysis and relevance of the code(s) with what is presented in the different articles and in association with the criteria to be observed. Thus, 3 groups of codes are presented, two models directly associated with the E-E (student-student) and E-P (student-teacher and vice versa) relationship used in previous studies on educational interactions in the classroom (Smith, 2008; Lopa: 2013; Jarauta and Medina, 2013).

From the analysis and coding carried out using the Atlas.ti software, it was possible to extract and observe a trend towards certain specific "axes" in teacher-student interaction with DLD, such as: a) Interaction in different forms and dimensions (between peers, with the teacher, in the social-school

environment, b) DLD from the educational point of view and c) Teaching and pedagogical and curricular adaptation.

Below we will present a synthesis of themes and sub-themes associated with the analysis carried out:

Table 3. Summary of information extracted: methods and results.

No .	Title	Author	Year	Type of study	The purpose of the study	Summary	Methodology	Instruments and Analysis	Discussion/ Conclusions
1	Description of the change from tel to tdl in an English-speaking context	Llorenç Andreu, Nadia Ahufinger, Alfonso Igualada and Mònica Sanz-Torrent	2021	Qualitative	Exhaustive review of all the implications that the results of these studies have in the conceptualization, evaluation and intervention of the disorder.	Study based on the description of the change from tel to tdl due to the great terminological dispersion between professionals and diagnostic manuals, which leads to proposing a new terminology "language development disorder (tdl)", this after using the delphi method.	Delphi method, one dedicated to tel diagnostic criteria (completed November 2015; Bishop et al., 2016) and another dedicated to terminology (completed September 2016; Bishop et al., 2017). The delphi method aims to achieve a consensus based on discussion among experts through an interactive process. The panel of participating experts made up what the authors named the catalise consortium, which was made up	The methodology is based on the selection of a panel of experts who must answer a questionnaire. Based on the results obtained, another questionnaire is carried out to be answered by the same experts, after informing them of the results obtained in the previous consultation. The process can be repeated several times until the highest possible level of consensus is reached. Finally, those responsible for the study draw their conclusions from the statistical treatment of the data obtained.	The label developmental language disorder was chosen instead of specific language impairment (in English, developmental language disorder instead of specific language impairment)tdl is defined as a severe and persistent disorder in the acquisition and development of oral language, which is not associated with a medical condition, which may involve one or more components of language to different degrees both at the expressive and receptive levels and which affects to social and/or school development (v.gr. Leonard, 1998; Bishop, 2016). It is committed to a more holistic conception that emphasizes the functional affectation that focuses on the incidence that the disorder has on the child's social and school development. It is necessary to carry out a similar process of reflection and consensus that culminates in a broad agreement shared by all the Spanish-speaking countries.

							of 59 people from English-speaking countries (Australia, Canada, Ireland, New Zealand, the United Kingdom and the United States).		
2	intervention in developmental language disorder (tdl). a systematic review (2000-2020)	claudio bahamonde, elisabet serrat and montserrat vilà	2021	qualitative	As a specific objective, it is proposed to analyze the interventions in tdl developed in educational settings and with an emphasis on professional	This work presents the results of a systematic review of the scientific production on intervention in tdl (formerly known as specific language disorder, tel) during the period 2000-2020.	This paper follows the Prisma procedures ([Preferred Reporting Items for Systematic Reviews and Meta-Analyses] Urrútia & Bonfill, 2010) for systematic reviews.	analysis of peer-reviewed academic articles that expose some intervention experience in the population with tdl/tel, published in English and Spanish, corresponding to the period 2000-2020	The conclusions point to the need to have a greater number of interventions based on an interactive-collaborative approach, to expand the coverage of objectives towards the learning and cognitive needs derived from the tdl, as well as to consider intra-subject designs, with observation of effects at medium and long term that includes youth and adults.

					collaborati on.				
3	development al language disorder (tdl/tel)	radld - raising aware ness of develop mental languag e disorder	202 1	qualitative	report on tdl/tel	collection of basic information about tel/tdl	compilation of background and information on tel/tdl and its implications.	documentary analysis	there is little awareness in the public sphere about this disorder, this is also reflected in the low rates of investigation in relation to the frequency and severity of tdl/tel
4	speech therapy intervention strategies in a case of development al language disorder (tdl)	kenny arbiesto, anaís pablo, diana nunez, merlyn barreto, wendy narro	202 0	quantitativ e	systematic ally describe the linguistic profile, carry out a diagnostic approach and show scientific evidence for speech therapy	the evaluation and diagnosis process is described and scientific evidence is presented for the speech therapy intervention of a child with a developmental language disorder (tdl).	speech therapy intervention approaches in tdl can be implicit and explicit. The implicit approach uses grammatical facilitation methods, highlighting modeling, focused stimulation, reformulations or conversational recasting: semantic	techniques such as coding through shapes, colors, arrows and other pictographic symbols that represent words, phrases, morphological units and sentence components. the combination of both has a significant impact on children with language disorders. Considering this, the intervention sessions for the case described	speech therapy intervention for a recently defined disorder, in continuous research and whose use by the specialist community is not yet universal, adopts methods, strategies and intervention techniques already used in the treatment of tel. finally, it is considered that more research should be carried out in relation to the tdl.

					intervention in the case of a child with indicators of tdl		and syntactic expansions (Ebbels, 2014). while, the explicit or direct approach, which uses metalinguistic methods55s for the teaching of 7grammatical rules.	contemplate both mentioned approaches.	
5	Providing Opportunities to Develop Prospective Teachers' Pedagogical Content Knowledge	Aina Appova Cynthia E Taylor	2020	Qualitative RS	Explore specific recommendations from the literature that can help MTEs, including mathematicians and novice MTEs, incorporate lesson ideas into their K-8 content courses in order to provide	Explore specific recommendations from the literature that can help MTEs, including mathematicians and novice MTEs, incorporate lesson ideas into their K-8 content courses in order to provide them with opportunities to develop PCK from future K-8 teachers. 8.	R-SYSTEMATIC	71 articles from the year 1998-2018	There was evidence of a consensus across studies suggesting that the knowledge that matters in teaching (and for teacher preparation) is deeply embedded in the activities that teachers engage in on a daily basis, and those activities often involve the use of all components. of PCK at the same time.

					them with opportunities to develop PCK from future K-8 teachers. 8.				
6	how we fail children with developmental language disorder?.	McGregor, K.	2020	quantitative	The purposes of this clinical focus article are to present evidence that these failures continue, to explore the reasons behind these failures, and to propose solutions.	For more than two decades, we have known that children with developmental language disorders (dlds) are underserved. we have also learned that dld does not attract the research attention it deserves given its prevalence and impact.	I reviewed the literature and applied bishop's (2010) bibliometric analysis procedures to quantify research efforts directed at dld compared to other neurodevelopmental disorders.	documentary review and statistical data	the percentage of children who are considered eligible for clinical services due to dld remains well below estimates based on the prevalence of dld in community samples. the amount of research done on dld in relation to other neurodevelopmental disorders remains low. Contributing factors include a lack of awareness of dld, the hidden nature of dld, entrenched politics, and the dissonance created when speech-language pathologists must diagnose dld in school settings.

7	what are the peer interaction strengths and difficulties in children with developmental language disorder? a systematic review	Lloyd-esenkaya, V., Russell, AJ, & Clair, M.	2020	qualitative	provide an overview of the strengths and challenges these children experience when interacting with other children.	A systematic review was conducted to summarize the literature on the strengths and difficulties of peer interaction in children with DLD. no time period restrictions were set, and the selection criteria took into account many of the diagnostic labels previously used to refer to dld. The studies included in this review involve English-speaking children of primary school age in the UK (4 to 11 years). a systematic search of databases identified 28 articles that met	The current review includes a systematic search of the literature and a narrative synthesis of research on peer interaction skills in children with DLD.	Searches were performed from March 2018 to May 2018 using the following databases; pubmed, embase, web of science core collection, web of science biosis citation index and scielo citation index, psycnet (psycinfo), eric, proquest international bibliography of the social sciences, dissertations and theses a&i and ovid (social policy and practice). search terms included variations of the words "children", "interaction" and "developmental language disorder", and the Boolean operators and and or were used	There is research exploring the peer interactions of children with dld, but the available literature is disparate in terms of the skill domains that are explored. Studies using questionnaire methods generally find that children with DLD have a higher prevalence of peer problems than children without DLD. Studies using direct observation, such as those measuring children's behavior on the playground or speech during peer interactions in the laboratory, provide tentative clues as to the underlying reasons for these peer problems, although the results These studies are very varied and the relationship between dld and social competence with peers seems to be very complex.
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						the inclusion criteria.			
8	an exploratory study of verbal interaction between children with different profiles of dld and their classroom teachers in educational dialogues	Bruce, B., & Hansson, K.	2019	qualitative	analyze the way students with dld talk with their teachers	children with a history of developmental language disorder (dld) entering school are a challenge for classroom teachers. Teachers are often not very familiar with DLD, and language difficulties in school-age children are often not obvious in everyday language based on context. however, their language remains vulnerable. the way of speaking of teachers with	qualitative study focused on identifying the typical characteristics according to the context and the type of difficulties of the child.	longitudinal research project, the background descriptions for the present study are from two points in time: at 4 or 5 years (time i). and at 9-10 years (moment ii). the main data for the study are dialogues from stage ii.	No difference was found in the interactive behavior of the teachers, neither in the amount of conversation nor in the number of questions, depending on whether or not the child had comprehension difficulties. however, the choice of topic for the structured contexts indicated that the teachers were aware of the child's area of weakness. for both children with a history of severe phonological difficulties, the focus was on decoding, spelling, and pronunciation, while for children with comprehension difficulties, the topics were more about concepts, grammar, and narrative skills.

						children with dld was studied			
9	individual and family factors in developmental language disorder (tdl)	alejandra auza b., christian peñaloz a castle	2019	quantitative	to analyze the relationship that exists between various individual and family context factors with the initial detection of the specific language disorder (tel/tdl).	636 children and their families participated, all monolingual and speakers of Spanish as their mother tongue. A questionnaire was applied that collects information on the child's life history, interaction with the family, the use of language at home and concern for linguistic development. a screening test was also used to detect the risk of having tel/tdl.	Speech therapy study with 636 children belonging to different socio-educational environments	sieve of tpl language problems, questionnaire for parents.	using a logistic model, three factors highly associated with the language condition were identified: gender, time in preschool, and maternal schooling years. Faced with the need and challenge of early identification of children with tel/tdl, these factors may allow the search to be focused on child populations with a greater probability of presenting the disorder.

10	5th–10th-grade in-service teachers' pedagogical content knowledge (PCK) for sustainable development in outdoor environment .	Aksland CT, Rundgren SC.	2019	qualitative	Objective is to explore how teachers from fifth to tenth grade (students from 10 to 15 years old) use the natural environment in their teaching practices, with special attention to the link with sustainable development (SD).	Need to promote educational spaces outside the classroom, which has a positive impact on the cognitive and behavioral development of children. Specifically encourage places where they interact with natural resources, pointing to a connection with sustainable development.	Qualitative, teachers are asked to answer a questionnaire and write texts and plenary with other teachers. These instances will be addressed through the content analysis strategy.	Questionnaire to 42 teachers from 5th to 10th grade	1. need to include outdoor education in professional development programs for teachers as part of their professional knowledge development2. Teachers turn to outdoor activities mainly when they need to teach A) biology/ecology concepts, B) explore visible pollution, and C) apply a context- and inquiry-based approach. concludes that in practice there is no greater link between activities with sustainable development itself, but rather with the 3 aforementioned themes.
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ele ve n	Teacher training and strategies to develop intra and interpersonal intelligence in the classroom.	Sáenz-López Buñuel, P., Fernández Ozcorta, EJ, Almagro Torres, BJ, & Heras Pérez, M. Á. DL	2019	Qualitative	Presenting an educational model based on emotional intelligence, first considers teacher training for its influence on the classroom climate. The socio-emotional component has benefits for both the teacher and the student.	Emotional Intelligence (Goleman, 1995), is the ability to effectively manage our emotions through self-knowledge, how what happens to us affects us, how we recover, how we motivate ourselves to do things, how we understand the behavior of others or the degree of assertiveness with which we communicate. do	Presentation of an educational model based on emotional intelligence	Presentation of an educational model based on emotional intelligence	He points out that the scientific literature has identified training gaps in the area of the development of emotional competencies in teacher training, for which a new look at the training process of teachers is required, which allows them to transform classroom climates and perceptions towards teaching-learning processes
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	How well prepared are the teachers of tomorrow? An examination of prospective mathematics teachers' pedagogical content knowledge	Mustafa Guler & Derya Celik	2019	Qualitative	To investigate the knowledge of future Turkish mathematics teachers about teaching strategies 2. to assess the mastery of the numerical content that is taught to the students	The study reported in this article investigates the mathematics teaching knowledge of prospective Turkish mathematics teachers in the content domain.	qualitative questionnaire	questionnaire	*1. Meaningful teaching requires: A) the teacher's ability to develop an effective learning strategy for certain students B) thorough knowledge of the content *2. Teachers had adequate content mastery, however, they did not have the ability to recognize the teaching difficulties of their students or create a learning strategy after it. *3. need for training in learning strategies for future teachers, since not all undergraduate courses pay attention to this.
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12	more or less likely to offend? young adults with a history of identified developmental language disorders	winstanley, m., webb, rt, & conti-ramsden, g.	2018	quantitative	examine outcomes of police-initiated contact and substance use of young adults with a history of identified dld versus same-age peers	There is now a wealth of literature showing that a disproportionate number of young people who come into contact with juvenile justice services have unidentified language difficulties. there is a dearth of research related to criminality outcomes among people with developmental language disorders (dld)	Police-initiated adversary contacts were examined in 84 young adults with a history of DLD and 88 amp.	achenbach adult self-report for ages 18 to 59 years.	adults with a history of dld who received targeted intervention during their school years reported less contact with their local police service compared with amps at age 24 years. there is a need for early identification of children with dld. early intervention aimed at ameliorating such difficulties could conceivably have distal outcomes relative to delinquency.
13	Longitudinal trends and year-to-year fluctuations instudent-teacher conflict and closeness: Associations	phillis lee,Karen L. Bierman	2018	quantitative	Observe the fluctuations in the student-teacher relationship in relation to	The article highlights the importance of the quality of student-teacher relationships in primary school. Fluctuations in the quality of the	Quantitative research, longitudinal study. Participants were 4-year-olds (Total N = 154) Participating families were of low income and parental education levels that	Poll	The authors reflect on variables not considered in this study and that can influence the quality of the student-teacher relationship, such as demographic data, teaching experience, personality, self-efficacy, stress and exhaustion on the part of the teacher, as well as the composition of the classroom can affect both the quality of the student-teacher relationship and the effects of peers on student aggression.

	with aggressive behavior problems.				the conflict and closeness between the two.	relationship between conflict and closeness are associated with aggressive behavior problems. From a conceptual point of view, conflictive relationships with teachers can evoke and reinforce hostile and oppositional reactions, thus amplifying aggression (Hamre & Pianta, 2001; Ladd & Burgess, 2001; Pianta & Stuhlman, 2004). In contrast, close relationships with primary school teachers may promote feelings of emotional safety and support the development of self-regulatory	were generally high school or less (92%). At the beginning of two successive school years, brochures describing the research project were distributed to parents of children of all ages. During home visits the study was described and informed consent was obtained, then the children were followed longitudinally.		
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						skills, fostering control of aggression. From the perspective of attachment models,			
14	Developing pedagogical content knowledge for teaching a new topic: More than teaching experience and subject matter knowledge.	Chan, KKH, Yung, BHW	2018	qualitative	Determine if experienced teachers have good strategies for teaching new topics to their students	Lack of studies on experienced teachers, as they all focus on new teachers. In addition, in relation to the above, there is evidence that teachers with experience in the area of education, not all of them use it as a systematized and self-assessed tool to improve their teaching performance. That is, when a teacher plans a new teaching, she should resort to a mental mapping of	qualitative, information obtained through classroom observations, field notes, semi-structured interviews, CoRe tables	qualitative, information obtained through classroom observations, field notes, semi-structured interviews, CoRe tables	*Both teachers used their teaching experience to plan how to teach a new topic, however, there were qualitative differences in how they made use of it *Teacher 1 used 2 planning strategies: 1. use of previous knowledge that he had of his students to identify learning focuses that are possibly difficult to understand and 2. a formative evaluation in their students to measure their learning. Thus, it could be said that their strategy began at an early stage of planning*evidence on how an overall mindset can work to better prepare teachers, allowing them to capitalize on their experience so that it becomes a strength in their development. race

						her strategies and evaluate which resources or strategies have been positive for effective learning and which ones she should stop using.			
fift ee n	slp-educator classroom collaboration : a review to inform reason-based practice	archibal d, l	201 7	qualitative	The purpose of this paper was to provide a comprehensive (but critical) review of the existing evidence related to collaborative activities in the SLP educator's classroom.	speech-language pathologists participate in collaborative services in the classroom with teachers and other educators to support children with developmental language disorders and other communication problems. recent reviews have provided a summary of only a small fraction of	literature review based on empirical studies	six studies focused on vocabulary intervention and outcomes in developmental language disorder (dld) teacher classroom collaborations were identified	although much of the evidence must be interpreted with great caution. this review is informative for those looking to adopt a .

						the available evidence and recommended the use of reason-based practice in the absence of a sufficient empirical evidence base around collaborative activities in the slp educator's classroom.			
16	Elementary students' effortful control and academic achievement : The mediating role of teacher–student relationship quality	Hernández, MM, Valiente, C., Eisenberg, N., Berger, RH, Spinrad, TL, VanSchoonvelde, SK, ... & Thompson, MS	2017	quantitative	The underlying concept is effortful control – the ability to intentionally shift attention, focus attention, and adaptively activate and inhibit behavior –	Although the article focuses mainly on the effortful control of children in early childhood, it is interesting how the topic is related to the development of temperament and the skills involved and has relevance for adaptation and social skills, how the environment and actors	Quantitative investigation. Participants were kindergarten children from five US schools. Two cohorts of children were drawn from 26 classrooms at the beginning of the academic year (2012 for Cohort 1 and 2013 for Cohort 2). Of approximately 541 children in the 26 classrooms, the parents of 301 children gave consent	Primary measures included parent, teacher, and observer ratings of children's effort control. Teachers' ratings on closeness and teacher-student conflict. Academic performance evaluations. Teachers received a questionnaire for each participating child during the spring semesters of kindergarten. Parents received a questionnaire for each participating child during the fall semester of kindergarten.	The mediating role of the quality of the teacher-student relationship is highlighted Children who have particularly low control in effort may be more likely to encounter difficulties with teachers at school. Children's problematic interactions with teachers likely reflect deficiencies in children's overt self-regulatory behaviors, whereas children's close interactions with teachers might be less associated with children's self-regulatory behaviors. Additional factors, including teacher characteristics or children's approach behaviors, may help explain how children's effortful control is related to teacher-student closeness and conflict.

					which is considered a self-regulatory component of intention-based temperament.	involved, such as teachers and peers, highlighting the quality of the teacher-student relationship.	for their child to participate in the study.		
17	depression and anxiety change from adolescence to adulthood in individuals with and without language impairment	botting n, toseeb u, pickles a, durkin k, conti-ramsde n g	2016	quantitative	determine patterns and predictors of change in depression and anxiety from adolescence to adulthood in people with language impairment (li)	this prospective longitudinal study aims to determine patterns and predictors of change in depression and anxiety from adolescence to adulthood in people with language impairment (li). individuals with li originally recruited at age 7 years and a comparison group of age-matched pairs	subjects participating in a large-scale longitudinal research program that began when children with li were 7 years old. at 16 years of age, a group of typically developing youth was recruited as a comparison sample.	self-report of the child manifest anxiety scale—revised (cmas-r). 3-way anova approach for ease of understanding and interpretation.	this study revealed differences in the depression and anxiety pathways of youth with li from adolescence to adulthood. on the other hand, the analysis indicates that environmental factors interact with mood vulnerability.

						(amp) were followed from adolescence (16 years) to adulthood (24 years).			
18	conduct problems co-occur with hyperactivity in children with language impairment: a longitudinal study from childhood to adolescence	pickles, a. durkin, k., mok, pl, toseeb, u. and conti-ramsden, g.	2016	qualitative	Analysis of joint trajectories of behavior problems and hyperactivity in children with language problems from infancy to adolescence.	Language impairment is a common developmental disorder that is frequently associated with externalizing problems. In this study, we investigated for the first time, joint trajectories of behavior problems and hyperactivity in children with language problems from infancy to adolescence. we determine	longitudinal study. Trajectory clustering method to simultaneously examine hyperactivity and conduct problem scores of 164 children with language problems at 7, 8, 11, and 16 years of age.	Statistical analyzes were performed within stata/se 12.0. we wanted to distinguish groups of children that takes into account specific fluctuations and shared commons.	reading difficulties were strongly associated with mixed behavior/hyperactivity problems that began early (childhood) and continued into adolescence (the persistent trajectory group). prosocial behaviors were found to protect against conduct problems.

						symptom concurrence patterns and identify specific risk and protective factors.			
19	The combined effects of teacher-child and peer relationships on children's social-emotional adjustment	Wang, C., Hatzigianni, M., Shahaei, A., Murray, E., and Harrison, L.J.	2016	quantitative	This study examined the combined effects of teacher-child relationships and peer relationships.	Teachers and peers represent two important dimensions of the social ecology of the classroom that have important implications for children's social-emotional adjustment. This study examined the combined effects of teacher-child relationships and peer relationships. Among the results, five different profiles of children	Quantitative research, (Conducted in Australia) longitudinal study, data collection was obtained from the database.	The Longitudinal Study of Australian Children (LSAC), kindergarten children, began in 2004 with n=4,983 children when they were 4 and 5 years old. The current study used data from the age range of 6 to 7 years and then from 8 to 9 years. In addition, a household interview was conducted, the sample for the present study was children who had completed self-report questions during the interview conducted with their homes. The study measures: • Relationships with teachers and peers (6 to 7 years old) • Socio-	• The role of teachers in creating a culturally, socially and emotionally respectful environment is often overlooked in teacher training and professional development programs • Teachers can capitalize on the positive relationships children establish with them to support children's social competence with peers and shape children's healthy orientations toward peer interactions. • Teachers who use organizational and instructional strategies related to managing children's time, behavior, and attention more effectively are also better able to support students' adaptive behaviors and peer interactions

						were identified: adaptive, teacher- oriented, prominent teacher-child conflict, non- adaptive and invisible.		emotional adjustment (8 to 9 years old)• Emotional well-being• Liking for school	• Avoiding conflict with children is a key challenge for teachers. For children to accept and internalize the academic and social values promoted by teachers, it is particularly important that teachers show unconditional care and support. • Children's positive social and emotional functioning has implications for their learning as well as for teachers' teaching practices (Durlak et al., 2011). Teachers and school psychologists are important resources for the successful adaptation of children during the first years of formal education. This study encourages continued effort to improve the quality of social relationships in the classroom during elementary school, in addition to a focus on effective instruction and academic interactions.
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Conclusions, implications and projections for future research on educational interactions with boys and girls with DLD

In general, the current sparse literature does not provide a consistent picture of the peer interaction skills of children with DLD. A more complete understanding of the peer interaction skills of children with DLD will allow teachers and speech-language therapists to build on children's pre-existing strengths to support their social development.

However, the need for a design where the same teacher interacts with children with different linguistic profiles remains latent. This would be more appropriate to investigate the adaptation of teachers to the child's profile. More specific instructions for teachers could lead to a clearer contrast between more and less structured contexts. Teachers need to be aware of a child's strengths and weaknesses, and how to accommodate them in interaction, in order to provide the appropriate degree of scaffolding to support both children's structural cognitive and linguistic skills, and their pragmatic skills, within of the zone of proximal development.

Finally, according to the specialized literature and its findings, some of the points to be addressed by the investigation are:

- **Interaction in the classroom, school and family (Codes: Int E-E; Int E-P; Int-Soc/ESc; IntFam)**

The information compiled through specialized scientific literature during the 2016-2022 period indicates that primary school students with DLD have social difficulties in interacting with peers. Peer interaction difficulties are common for children and adolescents with DLD, resulting in reduced positive social interactions and feedback. In the context of typical language development, people interact and develop their social skills, which highlights the relevance of interaction with the child, family and school.

The evidence shows that there is a significant impact on daily social interactions or educational progress, and it is common for DLD to occur together with other types of learning and relational difficulties, such as behavioral and social interaction problems. Here the family plays a fundamental role because the findings show that there is a close relationship between DLD with deficiencies in the adequacy of input, reciprocity and frequency of verbal interaction provided by parents and its implications in the classroom.

Social interactions with peers in nondemanding communicative contexts, such as playing sports, may prevent the development of problem behaviors by allowing children to successfully engage in social contexts that foster self-regulation and inhibitory control.

- **DLD/TDL. Language development disorder in interactions, learning and classroom processes (Codes: AdDoc; Hab/SOCIAL +; Hab/SOCIAL -)**

The impact of DLD may be strongest in childhood and adolescence, when language plays a key role in learning, social interaction, and emotional regulation. Compulsory schooling brings with it difficulties with academic subjects and social difficulties with interactions with peers. These factors are likely to increase stress, with direct implications for learning, classroom

relationships and the processes that the classroom itself generates on a daily basis.

- **Implications for Teaching (Codes: AdDoc; Int-E-P; Int-Soc/ESC)**

In the first place, the specialists (psychopedagogues, differential teachers belonging to the school, together with the regular classroom teacher, have the responsibility of supporting the academic, social/interactive, emotional and vocational progress of children with communication disorders. To achieve this, these specialists must increasingly work in collaboration with teachers, other educators, and school aides in the classroom, an approach that serves to bring together expertise for a more effective educational program for children. target children and others.

Expanded approaches are required to support children with DLD. These may include participation in promotional and awareness campaigns; clearer communication with the families we serve and improved collaborations with classroom teachers; the implementation of language tests in schools; participation in policy formulation; and the development of service delivery models that work alongside those that exist in our schools and complement their role. provision of services that work together with those that exist in our schools and complement their function.

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