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What primary grade teachers need to know about speech and language

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What primary grade teachers need to know about speech and language

By

Evanthia Argyriou

Action Thesis Submitted in Partial Fulfillment of the Requirements
for the Degree of Master of Arts in Education

California State University at Monterey Bay

December 2007

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Action Thesis Signature Page

What primary grade teachers need to know about speech and language

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ABSTRACT

The primary purpose of my action research and thesis is to write a guide for the teachers of very young children (Grades preK-2) to help them identify the children in their classrooms who may have speech and language disorders, and therefore refer them for assistance in a timely manner. There are several studies supporting the idea that difficulty in speech and language affects the development of literacy skills, and I believe all teachers need to be informed of the problem. I therefore decided to write a guide for the teachers of preschool, kindergarten, and 1st and 2nd grade children including research-based information to help them identify children with these special needs. In addition, I conducted six interviews with teachers: four general educators—one from each of grades preschool, kindergarten, 1st, and 2nd grade—and two special educators about what they would like me to include in the guide about this topic. Their answers along with data from research are included in the guide.
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CHAPTER I

The primary purpose of my action research and thesis is to write a guide for the teachers of very young children (Grades preK-2) to help them identify the children in their classrooms who may have speech and language disorders, and therefore refers them for assistance in a timely manner.

Introduction

Working for two years as a full-time speech language pathologist in a private setting, I found myself at a point where I was contemplating unanswered questions about speech and language disorders in childhood. On one hand, I had had been working with many preschool-age children with speech and/or language disorders, who then entered school without having difficulties with oral language, and who continued school without experiencing difficulties with the development of literacy skills. On the other hand, I also had been working with many children at 3rd grade and beyond who came to my setting asking for special education because they had difficulties with the development of literacy skills, but their assessments showed that they were also in need of speech and/or language therapy. At the same time, I was facing many difficulties collaborating with their teachers who were not informed about the relationship between oracy and literacy and could not understand my role in the intervention of these children’s education. As a
result, they were not willing to listen to my consultation and follow my instructions with respect to these children.

Consequently, there were always three questions in my mind: (1) Why do many children not ask for intervention until 3rd grade and above, by which time their problems have been multiplied, while others come earlier, e.g., at the preschool age? (2) How might these older children be performing in school now, if they had started therapy during their preschool years? (3) Why did these older children’s primary grades teachers not notice that these children needed speech and/or language therapy? I realized very soon that the first and third questions are more like a question and an answer. That is, many children ask for intervention at a later school age, when their problems have been multiplied, because their primary grade teachers did not notice that these children needed speech and/or language therapy. The second question can easily be answered based on my experience with children who asked for therapy at preschool age: Had the older children received therapy at younger ages, they would not have faced difficulties with the development of literacy skills in later grades.

The most significant question, to me, is the one about teachers who did not “notice” that some children had difficulties with oral language and needed speech and/or language therapy at a preschool age. I suspected that teachers may not have enough training about speech and language development and speech and language disorders, so that they can refer each child early for therapy. I also suspected that they do not have enough training about how speech and language disorders can affect the development of literacy skills, as they could not even understand the role of a speech and language therapist consulting with them about a child with this kind of difficulties.
Entering the Master of Arts in Education graduate program with emphasis in Special Education at California State University, Monterey Bay, and especially with experience in speech and language pathology, I thought that this could be my chance to be officially engaged with this topic and try to connect these three sciences: Speech and Language Pathology, Education, and Special Education. I believe that if educators are trained enough about speech and language development, speech and language disorders, and how they affect the development of literacy skills, this will lead to many more children coming in for speech and language therapy at a preschool age, and thus to a lesser need for special education for the development of literacy skills by the time they reach school age.

**Statement of the Problem**

Speech and language disorders are very common childhood disabilities affecting many children. Research has shown that difficulties and irregularities in speech and language are strongly correlated with difficulties in reading and writing in the future, when a child goes to school (Lyon, 1999; Treiman, 1985). The literature on oracy and literacy supports a reciprocal relationship between speech and language disorders and difficulties with reading and writing (Hogan, Catts, & Little, 2005). Not earlier than the late 90s, when several studies started to take place, the clinicians began to be informed and accept that literacy is directly related to the oracy. The following years, the topic became a hot issue for which many studies have been conducted, including each time a different aspect of speech and/or language to be the predictor of and/or the causal factor in the development of literacy skills (Snow, Scarbough, and Burns, 1999).
In addition, Snow et al. (1999, p. 50) wrote that “Reading researchers, who used to think of reading development as something that started in first grade with formal instruction, have come to realize that many developments during the preschool period constitute early accomplishments in literacy, and thus that literacy development is intertwined with language acquisition from a very young age”. So, we do not have to wait until the child goes to 1st or 2nd grade to see how s/he develops the literacy skills; rather, we can have an idea about the accomplishments or difficulties from preschool years. This can play a significant role in terms of early identification and intervention.

The number of children with speech and language disorders is increasing, and so is the number of children with learning difficulties. Since the last decade, big steps have been made in research in these areas, so now we are able to use the research findings to ‘prevent’ the learning disabilities. If the children with speech and language disorders are recognized early and start receiving intervention at a very young age, then we can prevent them from experiencing difficulties in reading and writing in the future or at least experiencing fewer difficulties.

General educators are in daily contact with children, and they usually have some idea when a child needs help with reading and writing or speech and language. When that occurs, special educators and speech language pathologists can assess the children and intervene, when it is necessary. Since the research shows that difficulties with spoken language result in difficulties with written language, general educators need to be trained enough to know the typical patterns of development of speech and language and to recognize the symptoms of speech and language disorders. They also need to know how oral language affects the development of literacy skills, so that they can “suspect” that a
child with difficulties in reading and writing actually may have a speech and/or language disorder. Therefore, general educators have a “key-role” in the intervention of children with speech and/or language disorders, since they can refer the children for therapy or not.

Shaughnessy and Sanger (2005) studied kindergarten teachers’ perceptions of language and literacy development, speech-language pathologists, and language interventions. The research took place in a Midwestern state in April 2002. The results showed that the teachers may be more knowledgeable about the role of language development than previously believed. Unfortunately, the results cannot be generalized, since the research was conducted in a specific state with limited number of participants.

In contrast, a similar study was done by Hall (2005), who discussed the knowledge, skills, and confidence of early year professionals in relation to young children’s speech and language development. The results showed that just under half of respondents reported their levels of initial training in normal language development as adequate; further, 70% of respondents expressed need for further training in terms of identifying children, and 63% expressed need for further training in speech sound development. Educators thus know that their training is not adequate, and they understand that they have to be more knowledgeable.

Purpose of the Study

In light of the all the studies supporting the idea that difficulty in speech and language affects the development of literacy skills (to be reviewed in greater depth in my next chapter), I believe all teachers need to be informed of the problem. I therefore decided to write a guide for the teachers of preschool, kindergarten, and 1st and 2nd grade
children including research-based information to help them identify children with these special needs.

The guide would include descriptions of all the components of speech and language that affect the development of literacy skills that teachers would need to know. The guide also would include a discussion of the typical development of speech and language, and descriptions of the symptoms of speech and language disorders. It would be a simple and intelligible guide, with all the necessary information included, so that a primary grades teacher could read it to acquire, and/or refresh and expand, his/her basic knowledge about speech and language whenever a child with speech and language disorders enters his/her classroom. The guide also could be used by teachers of higher grades, if they have students with difficulties in the development of literacy skills and “suspect” that issues with speech and/or language are the base of their difficulties. The guide would also be available in electronic copy for use at a workshop or seminar for teachers about speech and language.

For the construction of the guide, I used studies related to the development of literacy skills and their connection with speech and language. I also conducted some basic research about the potential usefulness of the guide by conducting a focus group interview with 6 teachers: 4 primary grade general educators, and 2 special educators. Through this research, I gathered data about what they would like included in this guide, such as what they find useful and interesting to know about speech and language, and what they consider to be gaps in their knowledge about speech and language. Details about construction of the guide will be provided in Chapter 3 of this thesis.

**Research Questions**
For the purpose of this research study, the major research question is the following: What would preschool, kindergarten, 1\textsuperscript{st}, and 2\textsuperscript{nd} grade level teachers most like included in a guide to help them improve their knowledge about speech and language development, speech and language disorders, and how they affect the development of literacy skills?

**Definitions of Terms**

For the purpose of this study, certain key terms will be defined as follows.

**Speech**: the verbal means of communicating which consists of the articulation, voice, and fluency.

**Language**: made up of socially-shared rules that include what words mean, how to make new words, how to put words together, what word combinations are best in what situations.

**Literacy**: a person’s ability to read and write.

**Primary grades/school**: a school usually including the first three or four grades of elementary school and sometimes kindergarten. For the purpose of this study, primary grades are preschool, kindergarten, 1\textsuperscript{st} and 2\textsuperscript{nd} grade.

**Phonology**: the study of the speech sound system, including the rules and patterns by which the phonemes are combined into words and phrases.

**Morpheme**: the smallest unit of meaning; any word or part of a word that conveys meaning and cannot be further divided into smaller meaningful elements.

**Semantics**: the study of the meaning of words, phrases and sentences.
Pragmatics: the study of how people comprehend and produce a communicative act or speech act in a concrete speech situation which is usually a conversation.

Summary

In this chapter I have provided the background and context of my action research, including my problem statement and my research question. In the next chapter, I will present a discussion of some of the key research studies that have been done relevant to my own research project.

CHAPTER 2

Literature Review

There are a great number of studies dealing with various aspects of language and literacy development, and the speech and language disorders that can affect it, as well as the crucial role that teachers play in all of this. In this chapter, I review some of the key studies that related most closely to my research questions. In particular, I focus on the following topics: Speech and language disorders affecting literacy development; Literacy development; and Teachers’ knowledge and perceptions.

Speech and language disorders affecting literacy development

It has been well established that children who do not develop typical language and literacy skills in their early years may not receive the required support or therapy, may have difficulties in developing further literacy skills, and may have difficulties with their whole academic performance as they progress to higher grades (Butler, 1999; Justice, Invernizzi & Meier, 2002; Shaughnessy & Sanger, 2005; Snow, Scarbough, and Burns, 1999). Lewis, Freebairn and Taylor (2000) examined children of preschool age: one group had expressive phonology disorder only, and the other group had expressive
phonology disorder and other language disorders. The researchers examined the children again at third and fourth grades. The findings showed that the children with only expressive phonology disorder had made more progress compared to the children who had multiple speech and language disorders. Nonetheless, 50-90% of children who have expressive phonology disorder at preschool age continue to face difficulties with it and with learning achievement in the future, when they enter school. It is, therefore, critical that these children be assessed early so that appropriate intervention efforts can be made. Such assessments would consist of a screening protocol for early literacy skills, which should include attention to: written language awareness, phonological awareness, letter name knowledge, grapheme-phoneme correspondence, literacy motivation, and home literacy. The protocol should have psychometric quality, comprehensiveness and sensitivity (Justice, Invernizzi & Meier, 2002).

**Phonological awareness**

There are a number of factors that can impact on the development of literacy skills and learning disabilities. One major factor is the use of phonics, which give us the rules to decode a single word but can result in reading disabilities when a child has difficulties with the process (Berninger, Thalberg, DeBruyn, & Smith; 1987). In addition, a child may have the ability to decode words, but lack the ability to understand word meanings, sentence syntax and discourse structures, which can also result in reading disabilities that, are in this case, connected with context comprehension (Berninger, Thalberg, DeBruyn, & Smith; 1987). Further, decoding and text comprehension can hide challenges for students with language learning disabilities (Farmer, 2000). For these reasons, Apel and Masterson (2000) suggested that ‘spelling instruction must be provided
by professionals with knowledge of the phonological, semantic, syntactic, morphological, and pragmatic aspects of language’ (p.83).

A number of studies have examined the effect of phonological awareness as an indicator of later reading ability, and found it to be significant compared to many other predictors (e.g., Hogan, Catts, and Little, 2005; Lonigan, Burgess, and Anthony, 2000; Roth, Speece and Cooper, 2002). One study focused on a group of children examined from late preschool and kindergarten through first grade. A second study targeted phonological awareness assessment in 570 kindergarten and 2nd grade students as a predictor of 2nd and 4th grade reading ability, respectively. The subjects, some of whom were language impaired and some of whom were not at the beginning of the study, were assessed in kindergarten for phonological awareness and letter identification, and then for phonological awareness, phonetic decoding and word reading at the 2nd and 4th grades. The results showed that phonological awareness and letter identification at the kindergarten level is a predictor of word reading at 2nd grade and, furthermore, that 2nd grade reading is a predictor of 4th grade reading and phonological awareness. These findings are significant in that they support the idea that phonological awareness assessment at kindergarten can be used to predict reading ability in 2nd grade, and that the reading level itself serves as a predictor at 2nd grade (Hogan, Catts, & Little, 2005; Roth, Speece, & Cooper, 2002).

The results of these studies can be explained by examining the reciprocal relationship of phonological awareness with reading. In the beginning, phonological awareness influences the development of reading skills, but when the child acquires them, the process of learning to read influences the more skillful development of
phonological awareness (Catts and Hogan, 2003; Carroll, 2007). Many studies have focused on the hot issue of phonological awareness, but as Stuart (2005) informed us: “Whether or not phoneme awareness is facilitated by prior training in rhyme awareness remains an unexplored issue, despite a consensus among researchers that the development of phonological skills proceeds from awareness of large units (syllables, onsets and rimes) to awareness of smaller units (phonemes)” (p.46).

**Phonological retrieval**

In addition to phonological awareness, phonological retrieval seems to play a key (but somewhat lesser) role. Phonological retrieval difficulties become obvious when children exhibit word-naming difficulties. It is believed that the children know the words, but they face difficulties retrieving them phonologically. As stated by Catts and Hogan (2003, p. 230), “problems retrieving phonological information, in turn, could explain why many poor readers fail to develop fluent word recognition, especially in oral reading.”

**Additional factors impacting on literacy skills and learning disabilities**

Scarborough (1998, 2000) inform us that early oral language skills can predict early literacy skills, while variables such as receptive and expressive vocabulary and morphosyntactic production and comprehension predict later literacy skills. These variables are more significant and predictive than others often connected with difficulties in the development of literacy skills, like frequency of parent-child shared book reading, preschool literacy interest, home literacy environment, and family socioeconomic status (cited in Justice, Invernizzi, & Meier, 2002). With reference to syntactic and semantic abilities, Share and Leikin (2004) “support the lexical/supralexical hypothesis proposing
that higher order semantic-syntactic abilities are primarily associated with text processing but only weakly, if at all, with lexical-level processing” (p.105).

Another factor that can affect the development of reading is prosodic sensitivity (Whalley & Hansen, 2006). Prosody refers to the patterns of stress and intonation in a language. At least one study has found that prosodic skills are significant in reading successfully, and Whalley & Hansen (2006) inform us that “prosodic sensitivity may also contribute to word identification skills beyond a role in the development of phonological awareness” (p.298).

Word and sentence repetition were identified as key factors that can differentiate children who are poor readers with language impairments from those who are poor readers without language impairments (Kamhi and Catts, 1986). Many different factors like phonological, morphological and lexical processing were examined, but ultimately the only real differences were found to be word and sentence repetition, leading the researchers to suggest future research to examine “low-level perceptual deficits in identifying and discriminating phonemes and difficulty forming accurate representations of linguistic (or linguistic-like) information” (Kamhi and Catts, 1986, pp.344-345).

Finally, the importance of genetic factors also has been examined for potential impacts on reading. For example, a study finding that language and nonverbal ability at 4½ years is a moderate predictor of reading skills at 7 years suggested that “genetic influences that affect early language skills continue to play a role later on, when children are learning to read” (Hayiou-Thomas, Harlaar, Dale, and Plomin, 2006, p.65). This same study also affirmed that the most predictive aspects of language for later reading skills are phonological processes and broader oral language skills, that phonological
short-term memory is very significant for reading, and that verbal fluency in early language is a very good predictor of later reading as well as grammatical skills and vocabulary (Hayiou-Thomas, Harlaar, Dale, and Plomin, 2006)

**Literacy development**

According to research, there appear to be three parameters of reading that are acquired from a very young age and come together later to result in a good reader: the written code, the message to be understood, and the reader’s purpose. These parameters provide us with a guide about exactly what children should be able to do at different ages. These three parameters are described aptly by Snow, Scarborough, and Burns, 1999 (p. 49) as: “Reading as a cognitive and psycholinguistic activity requires the use of form (the written code) to obtain meaning (the message to be understood), within the context of the reader’s purpose (for learning, for enjoyment, for insight).” The following detailed description of these parameters and the skills involved in them is derived from a number of studies, but is structured primarily according to the arguments presented by Snow et al. (1999).

A three-year-old starts with the purpose of the reading by being exposed to different reading opportunities. S/he can understand that reading is used for different functions such as communication, knowledge, and information. S/he also acquires basic rules of reading such as read from front to back, from left to write and look where letters are appeared not pictures (Justice, Invernizzi & Meier, 2002). It is a usual phenomenon of this age to see children “pretending” to read a tale, pointing to the letters with their little fingers and saying their scenario of the story. They have understood that all these symbols mean something that you can
express orally and give you a story. Olofsson and NiedersØe (1999) expressed a very interesting thought about the children of this age, which is “knowledge of nursery rhymes acts as an indicator of the child’s basic language development. That is, a child with enough talent for appreciating phonological structure will find it interesting and amusing to engage in nursery rhymes and language play and thus learn more rhymes” (p.470).

A four-year-old starts realizing the internal structure of words like syllables and phonemes and learning to write letters and their names. This seems to be a very important factor for future literacy skills since the children, who do not have expressive and/or language disorders at this age, may have literacy difficulties if they have letter knowledge delayed development from this age until they go to school (Lyytinen, Eklund, & Lyytinen, 2005). They also learn new vocabulary which will support text comprehension later.

Children of kindergarten age start realizing how the alphabetic system works. Often times, they can read short words with assistance. Finally, they can understand long and complex texts. Letter knowledge and phonological awareness at this age of five years old are the two predictors of later reading skills (Carroll, 2007), while word retrieval and oral definitions in kindergarten seem to be the two predictors of reading comprehension in second grade (Roth, Speece and Cooper, 2002).

First graders know sound-letter correspondences in reading words, use alphabetic principle to nonwords, answer questions about text meaning, and obtain knowledge using literacy (Lombardino and Ahmed, 2000).
Second graders are more proficient in spelling, vocabulary, and discourse skills. Automaticity of those skills starts appearing. At third grade and beyond, students start silent independent reading and use reading to learn. The inferential, vocabulary, syntactic, and discourse skills that the child had previously mastered in oral language become a significant base for understanding the written materials.

All this information helps us understand how children start having their contact with literacy development at a very young age, how they acquire little pieces every day, so that they become mature readers later.

Teacher’s knowledge and perceptions

Teachers’ knowledge

It is significant that primary grade teachers understand how important oral language skills are for the development of literacy skills and that they need to help young children develop these oral language skills (Shaughnessy & Sanger, 2005; Snow, Scarborough, and Burns, 1999). Moats (1995) informs us that “the limited phonemic awareness of teachers, their gaps in basic linguistic knowledge and the difficulty with which the requisite information about language is gained have become apparent to this author through a series of teachers’ training experiences” (p.45). Moats and Foorman (2003) examined teachers’ knowledge about reading instruction for four years and concluded that teachers start instructing students for reading without having previously mastered knowledge about language and reading development. They suggested that teachers should be formally instructed about those essential parts of their work and not try to acquire the knowledge based on their experience. Research shows that primary
grade teachers express the need for additional training, especially for identifying children (70%) and speech sound development (63.3%) (Hall, 2005). Research by Mroz (2006) found that 29% of educators compare children with peers, in order to identify children with speech and/or language difficulties. Snow, Scarborough, and Burns (1999) also state that individual differences are a cause for concern, since some children seem to lag behind when comparing to others. They also support that they need particularly practical suggestions. In this way, they will support and extend the intervention, given the circumstances of their role and the specific setting they work each time (Hall, 2005).

Teachers seem to understand that language affects literacy development, since they indicate that children’s language problems influence their progress in reading. In addition, they support that they know when to ask for referral for children with speech and/or language difficulties (Shaughnessy & Sanger, 2005). Research shows that even the confident teachers were not more capable of identifying children with speech and/or language problems, meaning that the existence of confidence or not is not objective (Hall, 2005). Fillmore and Snow (2000) believe that teachers’ knowledge about language is much less than what they need to know and they suggest teachers should take some courses relating to language and linguistics, language and cultural diversity, sociolinguistics for educators in a linguistically diverse society, language development, second language learning and teaching, the language of academic discourse, and text analysis and language understanding in educational settings.

*Teachers collaborating with speech and language therapists*

Teachers face challenges when working with young children and express the need for a shared role with speech and language therapists in helping children with language
and literacy difficulties (Shaughnessy & Sanger, 2005; Snow, Scarbough, and Burns, 1999). They expressed the need to have access on a regular basis to a specific provider of speech and language services (Hall, 2005). They would like to spend time with speech and language therapists (Wright & Kersner, 1999), e.g., training together or receiving specialist information. They need to collaborate with speech and language therapists, in order to find the best instructional methods to support the regular reading program (Shaughnessy & Sanger, 2005).

Wright and Kersner (2004) also discussed the collaboration of speech and language therapists and teachers in a study about Standard Funds projects, which included Borough A and Borough B. The first recommendation they made was for the development of speech and language services within the school, so that the children do not have to go to a health clinic for therapy, and the second was for the additional development of the existing speech and language services of some schools. The researchers conducted interviews with both the teachers and therapists at the end of the projects. The benefits of the collaboration included ‘carry-over’ of the children’s therapy into the classroom, sharing knowledge and ideas, and gaining new knowledge about speech and language problems and educational issues. Tollerfield (2003) also did research about collaboration between speech and language pathologists and teachers, with similar results which indicated profession-specific contributions of skills and knowledge, profession-specific perspectives which were different, shared-knowledge, and gained-knowledge from each other. The results also indicated many barriers such as service accessibility, professional interaction models, social interaction between them,
decision-making, curriculum, and use of professional jargon on behalf of speech and language pathologists.

Technology can also play a distinctive role at this problem, as email discussion lists, electronic resources, and frequently asked questions can give valuable information and support to educators, who do not have the opportunity to have a face-to-face contact with speech and language specialists (Hall, 2005).

Primary grade teachers feel that they have a complex role with lack of training, information and collaboration with parents or speech and language therapists resulting in problematic identification, support, and referral (Hall, 2005). The need for support as referred to identification of children at risk is also expressed by Mroz (2006), who believes that “there will be increasing reliance upon early years educators and other early years professionals who have clearly indicated that they need more support to identify children at risk from speech, language, and communication difficulties” (p.169). This is very significant, since two thirds of the children were initially referred for intervention by primary grades educators. In terms of support from speech and language therapists, early years’ educators believe that it impacts directly on child’s progress and/or their understanding.

**Speech and language therapists’ role**

In contrast, speech and language therapists sometimes may need to give additional information to teachers, in order to clarify their role in the development of literacy skills. Wright and Kersner (1999) talk about “clearer definitions of roles” as referred to teachers’ and speech and language therapists’ answers when they were asked if there
were some ways in which their current working relationship with teacher/therapist could be improved.

Speech and language pathologists’ roles at the educational system are substantial, since they can support students with language-based learning disabilities concerning different aspects of their needs. First, they work with children for oral language skills, which will later support the literacy progress, like phoneme awareness, vocabulary, and attention to inflectional and morphological markers. Second, they do assessments of these reading-related language skills. Third, they collaborate with teachers, in order to inform them which children are at risk for reading difficulties and consult them about what they can do to help children who have reading difficulties (Snow, Scarborough, and Burns, 1999; Justice, Invernizzi & Meier, 2002). Another issue that speech and language therapists need to address with teachers is that children with speech and/or language disorders oftentimes show challenging behavior in their classrooms (Nungesser & Watkins, 2005). Teachers need to be informed and sensitive about this issue, since a challenging behavior may “hide” communication difficulties and need to be resolved as such. Finally, they inform parents about the relationship between language and literacy skills and what they can do to help their children in daily life (Snow, Scarborough, and Burns, 1999; Lombardino and Ahmed, 2000). This is very significant since parents can play a significant role in the identification and prognosis of their children. Hall and Segarra (2007) found that parents’ reports can help therapists to realize “hidden” difficulties not otherwise identified by usual diagnostic tools, and that parental report of their children’s communication skills have a predictive value related to their later academic performance.
Summary

In this chapter I have reviewed some of the key literature about literacy development and the major factors impacting on it as they relate to my study. In the next chapter, I will provide a detailed description of the methods I used to conduct my study.

Chapter III

Methodology

The purpose of this research was to write a guide to the early detection of speech and language disorders for the teachers of preschool, kindergarten, 1st and 2nd grade. The context of the guide consisted of speech and language development, speech and language disorders, and how they affect the development of literacy skills. The construction and contents of the guide were derived primarily from current research on the development of literacy skills and their connection with speech and language, all of which were referenced in Chapter II, as those studies provide evidence about which aspects of speech and language affect the development of literacy skills. I also conducted a mini research project in which I interviewed four primary grade general educators and two special educators to gather data about what they believed would be most helpful to include in this guide. In particular, I wanted to know what they would find useful and interesting to know about speech and language.

I used instrumental case study methodology for my thesis, since this is the most appropriate for my research. "The intention of case study research is generally proposed
as to gain an “indepth” understanding of the concerned phenomena in a “real-life” setting” (Dobson, 2001, pp.283). For my research, the 6 general and special educators, who were interviewed about speech and language and the construction of the guide, were a part of the whole. They were a representative part of the whole, which support the theory that teachers lack of knowledge about speech and language and they need help about that. Stake (1994) supports about instrumental case study: “The case is of secondary interest; it plays a supportive role, facilitating our understanding of something else” (p. 237).

**Setting**

The setting of my mini research project was the town of Livadia, Greece and the capital city of Greece, Athens. Livadia is located right at the centre of Greece and has direct access to the other big cities in Greece, mainly with Athens which is 85 miles from it. Livadia is a provincial town where residents’ main financial income comes from agriculture. I selected this location because I was born there, and I also worked as a speech language pathologist there. I therefore was aware that the educators who work in the area are not well trained about speech and language development, speech and language disorders, and how they affect the development of literacy skills. I also selected some participants from Athens, since the participation was limited in Livadia and time constraints between schedules posed various difficulties with respect to the interview process.

**Participants**

The general and special educators I interviewed were all teachers working at schools in the towns of Livadia and Athens, except one who was working in a private
setting as a special educator. Specifically, they included four primary grade general educators and two special educators. The general educators represented each of grades preschool, kindergarten, 1st and 2nd grade.

- B.P. teaches preschool in Athens. She is a female, in her late-twenties, and has had 5 years of experience. She received her teacher training in Greece and she has also taught kindergarten for 2 years. She likes working with very young children and she is currently working with one child who seems to lag behind (in her opinion) in oral language.

- B.T. teaches kindergarten in Athens. She is a female, in her mid-thirties, and has had 9 years of experience. She received her teacher training in Greece and has also worked with children of preschool age. She does not have any child with speech and/or language difficulties this year in her classroom, but she has had in the past.

- E.M. teaches 1st grade in Athens. She is a female, in her late thirties, and has had 12 years of teaching experience. She received her teacher training in Greece and she has also taught 2nd, 3rd, and 6th grades. She has 3 students with difficulties in the development of literacy skills in her classroom.

- N.L. teaches 2nd grade in Livadia. She is a female, in her forties, and has had 21 years of teaching experience. She received her teacher training in Greece and she has taught all 6 grades of Elementary School through her experience. She prefers teaching 1st or 2nd grade, because she feels she can still influence the development of character and personality at this age. She deals with two children with literacy
development difficulties in her classroom this year. She is very sensitive about this topic.

- E.L. teaches children of various chronological ages at the primary grade educational level in Livadia. She is a female, in her mid-thirties, and has had 7 years of teaching experience. She is a special educator working in a private setting. She received her training in Sociology in Greece and she is currently finishing her second degree in Psychology.

- K.R. teaches also children of various chronological ages at the primary grade educational level in Athens. He is a male, in his mid-forties, and has had about 23 years of teaching experience. He received his teacher training in Greece, and after 12 years of teaching, he completed the special education credential.

**Selection Process**

For the selection of participants, I used the convenience sampling technique. I contacted teachers from Livadia and Athens whom I knew from personal contacts and informed them about my intention to conduct this mini research project. I asked them all to consider the interview participation. I explained to them that the results of the research, along with evidence from other studies, will help me to write the guide. I described what the guide would be and how it would be useful to them. I answered all the questions to their satisfaction and I told them that the most preferable volunteers would be those currently working with children in their classrooms with speech and/or language disorders and who also had difficulties with the development of literacy skills. Finally, I explained the process of the interview and how the teachers would be contributing to the research base on reading and language difficulties with their participation in this study. When I
came up with six participants who declared their desire to take part in my research, I stopped the process.

**Interview**

The interview questions were the following:

1) What valuable information do you feel you need to know about typical speech and language development?

2) What important elements would you like to know about speech and language disorders?

3) What would you like to see in this guide on how oral language difficulties affect reading skills?

4) What else would you like me to include in the guide about speech and language skills?

**Data Collection**

I collected the data through individual interviews at the place and date of the participants’ satisfaction. Interviews generally took one hour each to be completed. Firstly, I talked a little with the participants about my own background educational level, experience, and what I am trying to fulfill with this interview and the entire thesis. Secondly, I gave them the Consent Forms and Audio Consent Forms. I explained to them every detail of the forms and I answered their questions to their satisfaction. Most of them had not ever taken part in a research project, so they had many questions to ask and hesitations to pose with reference to the forms they had to sign. At first, they thought that the forms would be something negative and binding for them, but then they realized that it...
was something for their own protection. Five out of six did not accept the option of being recorded, so I had to take notes. Thirdly, I asked my questions and wrote down the answers. Whenever a participant gave me an answer that was irrelevant to the topic and/or to the question I asked, I asked for clarification, probed them for further explanation, or asked them a specific, relevant, close-ended question.

Data Analysis

I analyzed the data by creating codes for the themes and then I coded the data based on them. For example, I saw oftentimes teachers saying that they want to know whatever would be essential and helpful in their daily teaching with children with speech and/or language and literacy difficulties. They did not have something specific to suggest; they just wanted to know whatever plays a role. Every time this theme came up, I coded it and I was finally able to say how many times this theme was mentioned and how important this was for the teachers.
CHAPTER IV

Results

The purpose of my research was to determine what information preschool, kindergarten, 1st, and 2nd grade level teachers would most like to be included in a guide to help them improve their knowledge about speech and language development, speech and language disorders, and how they affect the development of literacy skills.

To this end, I conducted six interviews with teachers: four general educators—one from each of grades preschool, kindergarten, 1st, and 2nd grade; and two special educators, as they also work with children facing difficulties with the development of literacy skills. These one-on-one interviews took place at the convenience of the participants. During the interviews, I recorded notes of participants’ answers, except in one case where the participant (a special educator) consented to being audiotaped. As described in Chapter III, each interview consisted of four questions. Participants’ responses to these questions are detailed below.

Interview Question #1

The first interview question was the following: What valuable information do you feel you need to know about typical speech and language development?
Table 1

<table>
<thead>
<tr>
<th>Everything, especially about preschool and kindergarten age</th>
<th>B.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Everything about all ages</td>
<td>B.T.</td>
</tr>
<tr>
<td>All stages, from newborn to school age</td>
<td>E.L.</td>
</tr>
<tr>
<td>Everything</td>
<td>E.M.</td>
</tr>
<tr>
<td>Everything for 5 years old and above</td>
<td>K.R.</td>
</tr>
<tr>
<td>What a child can do at different ages</td>
<td>N.L.</td>
</tr>
</tbody>
</table>

The major theme tying together the answers to this question is “everything”. Five out of 6 wanted to know what a child can do at all different ages; the sixth participant focused specifically on what happens in oral language in children from the age of 5 years and beyond. Another said that, even though she wants to know what children are supposed to say at different ages, she especially wants to know about preschool and kindergarten age. Both of these participants wanted to know more about children in the age groups with which they work every day.

Interview Question #2

The second interview question was the following: What important elements would you like to know about speech and language disorders?

Table 2

<table>
<thead>
<tr>
<th>Disorders of preschool and kindergarten age</th>
<th>B.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nothing; topic is too specific and detailed for a teacher</td>
<td>B.T.</td>
</tr>
<tr>
<td>Which of the disorders and their symptoms are epigrammatic, and what are simple ways of intervention</td>
<td>E.L.</td>
</tr>
</tbody>
</table>
Responses to this question suggested that participants were interested primarily in “which disorders” and “symptoms”. Three out of six participants mentioned that they wanted to know what disorders are in children, but one of them wanted to know the disorders associated with the preschool and kindergarten ages only. Moreover, three out of six also indicated that they wanted to know the symptoms of those disorders. One participant believed that the topic of disorders is too detailed for her as teacher and thus indicated that she desired no further information. Another participant mentioned that she wanted to know “the basics”, but was not specific about what that is.

*Interview Question #3*

The third interview question was the following: What would you like to see in this guide on how oral language difficulties affect reading skills?

Table 3

| What they are, their symptoms, and what they mean for the child | E.M. |
| Symptonds | K.R. |
| The basics | N.L. |

| Not able to express opinion | B.P. |
| Which skills of oral language at kindergarten show that a child is prepared for 1st grade | B.T. |
| Strategies for intervention; example of normal vs. pathological | E.L. |
| What the difficulties are | E.M. |
| Examples of children with oral language difficulties, then an identification and explanation of each disorder along with an | K.R. |
Responses to this question suggested that participants were interested in examples of oral language difficulties, intervention strategies, and skills. Two out of six participants asked for examples. They wanted to know how children with oral language difficulties expressed themselves both orally and using written language; further, they wanted examples of the relationship between the oral and written language. Another participant mentioned that she wanted to know which difficulties of oral language can affect the development of literacy skills. In the same vein, another participant said that she wanted to know which skills of oral language can indicate, at kindergarten age, that a child is ready for the development of literacy skills at 1st grade. Another participant expressed the desire to be given strategies for intervention as well as examples of normal vs pathological oral language at a given age. The preschool teacher did not express any opinion, since the children she works with are not able yet to read and write. Overall, the theme that emerged here is that the teachers do not want theory in the guide, but rather specific things that are easily understood and can be used in daily practice.

*Interview Question #4*

The fourth interview question was broad and gave the participants the opportunity to add whatever they find useful to the developing guide: What else would you like me to include in the guide about speech and language skills?

Table 4
She did not mention something new  

| Activities to prepare children for 1st grade, and how to talk with parents about their child’s need to be seen by a specialist | B.T. |
| How I can help as a teacher in the classroom | E.M. |
| Bibliography of references about speech and language | K.R. |
| Factors affecting a child with difficulties, possible solutions, and a bibliography | N.L. |

Two out of six participants did not mention anything new; they just repeated the same things they had already said. Two out of six participants expressed their desire to have a bibliography, in Greek, about the topic. One participant expressed that she wanted to know how she can help given the circumstances of a classroom. The kindergarten teacher asked for activities that could help children to be prepared for 1st grade. She also asked for consultation on how to deal with parents who, when they are told their child needs to be seen by a specialist, tend to deny it. Finally, one participant wanted to know what kinds of factors influence the development of oral language difficulties in children, and what steps a teacher needs to take to help a child with these kinds of difficulties.

Summary

My overall impression from interviews is that general and special educators expressed their desire to have this guide as a daily tool for their job. They want to include at this guide everything is useful for them, especially the whole typical speech and language
CHAPTER V

Summary

The purpose of my action research and thesis was to write a guide for the teachers of very young children (Grades preK-2) to help them identify the children in their classrooms who may have speech and language disorders, and refer them for assistance in a timely manner.

Since there are a great number of studies supporting the idea that difficulty in speech and language affects the development of literacy skills, I believe all teachers need to be informed of the problem. I therefore decided to write a guide for the teachers of preschool, kindergarten, and 1st and 2nd grade children including research-based information to help them identify children with these special needs. The construction and contents of the guide were derived primarily from current research on the development of literacy skills and their connection with speech and language, all of which were referenced in Chapter II, as those studies provide evidence about which aspects of speech and language affect the development of literacy skills. I also conducted a mini research project in which I interviewed four primary grade general educators and two special educators to gather data about what they believed would be most helpful to include in this guide. In
particular, I wanted to know what they would find useful and interesting to know about speech and language. My research question was the following: What would preschool, kindergarten, 1\textsuperscript{st}, and 2\textsuperscript{nd} grade level teachers most like included in a guide to help them improve their knowledge about speech and language development, speech and language disorders, and how they affect the development of literacy skills?

The participants were general and special educators working in schools of Greece, especially in the cities of Athens and Livadia. The general educators represented each of grades preschool, kindergarten, 1\textsuperscript{st} and 2\textsuperscript{nd} grade. The most preferable volunteers were those currently working with children who had speech and/or language disorders and who also had difficulties with the development of literacy skills. The interviews took place at the convenience of participants, and they were on a one-to-one basis. I recorded written notes of participants’ responses except for one participant—a special educator—who consented to be audiotaped.

The analysis of the data revealed certain themes that emerged from each question. With reference to the first interview question, whose results are summarized in Table 1, the theme is “everything”. That is, participants all wanted to know the typical development of speech and language in young children, except for one who preferred to know only about the age with whom he works.

Table 2 summarizes the responses to the second interview question, which collectively suggest the themes “which disorders” and “symptoms”. That is, most of the participants expressed the desire to know about what kinds of disorders their students might face, and what their symptoms would be.
Table 3 summarizes responses to the third interview question. Overall, two out of the six participants asked for examples of disorders, and one asked for strategies. From their responses, it appears that the teachers do not seem to want theory in the guide, but rather specific things that are easily understood and can be used in daily practice.

Table 4 provides participants’ responses to the fourth interview question, which asked them to indicate any additional information they would like in a guide. The only additional information suggested—by two of the six participants—was the need for a bibliography, written in Greek, of resources useful to them in their classrooms.

My overall impression from the interviews is that general and special educators welcomed the construction of the guide. They wanted to have a tool like that in their hands. They feel “loneliness” in their daily practice. They have children who are “different” from the majority, but they do not know what these children have, why they have it, or what they can do to help them; further, they do not have anybody to ask for help. The reality in Greek schools is that there are not special educators in the vast majority of schools and there are not speech and language pathologists in any school. This means that teachers do not have a person to whom to address their problems and concerns. Even if they found a specialist outside the school environment to whom they could ask their questions, they would not be able to implement any suggested strategies in the classroom, as they do not have the time. There are no teachers’ aids in Greek classrooms, and the teacher has to deal with 25 pupils on his/her own in the class. For all these reasons, teachers expressed the desire to have a book with useful information, which could help them acquire basic knowledge about speech and language, which is also basic knowledge about literacy skills.
The context of the guide developed in response to participants’ concerns consisted of research-based information about speech and language development, speech and language disorders, and how they affect the development of literacy skills. There is a separate chapter at the end of the guide including all the information acquired from the analysis of the data, which was unique for these participants (for example, a bibliography in Greek). It is a simple and intelligible guide, with all the necessary information included, so that a primary grades teacher could read it to acquire, refresh or expand his/her basic knowledge about speech and language whenever a child with speech and language disorders enters his/her classroom.

Future Research

The implications for future research are clearly defined from the results of this research. First, the guide should be examined in terms of usefulness. It should be tried out by general and special educators who would then be interviewed to determine how useful and helpful it was for them. Specifically, the teachers would express their opinions about if and how the guide helped them, what they liked and did not like about it, and what they would add to it.

Second, the guide should be examined in terms of its ability to convey knowledge about speech and language development disorders to teachers. For example, researchers could “pretest” the existing knowledge of a certain number of teachers by giving them a questionnaire about speech and language development, speech and language disorders and how they affect the development of literacy skills. Then, they would give the teachers the guide to study. Finally, they would give them the questionnaire again as a “posttest”, so
that researchers would have a clear idea about how much knowledge the teachers gained by studying the guide.

Third, there should be a research study conducted about what teachers in Greece do when they have a child with speech and language disorders (or special needs generally) in their classroom, where they can address their questions, and whom they can consult about them. I believe that a study like that could lead to changes in teachers’ education, since it would be realized how significant their gaps of knowledge are; a guide may be useful and helpful, but maybe their needs are greater than that.

Overall, I believe that this research project gave me the opportunity to connect directly with teachers about a specific and important daily issue. The teachers expressed their ideas about what they would like to see in a guide to help them improve their knowledge about speech and language development and disorders. They also expressed an overall desire to have this tool and their satisfaction about having something designed specifically to help them. And last but not least, it is important to note that this whole project is meant to help students ask for help early, before their problems have been multiplied. This guide, therefore, is something constructed first with the children in mind, and then the teachers.
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APPENDIX A

Guide

Speech and Language Essentials

There are two basic terms which are usually confused in daily life. People use the words “speech” and “language” for the same purpose, not knowing that from a linguistic point of view these are two different things with distinctive limits. The American Speech and Hearing Association (ASHA) inform us of the following:

*Language* is made up of socially shared rules that include the following:

- What words mean (e.g., "star" can refer to a bright object in the night sky or a celebrity)
- How to make new words (e.g., friend, friendly, unfriendly)
- How to put words together (e.g., "Peg walked to the new store" rather than "Peg walk store new")
- What word combinations are best in what situations ("Would you mind moving your foot?" could quickly change to "Get off my foot, please!" if the first request did not produce results)

*Speech* is the verbal means of communicating. Speech consists of the following:

- **Articulation**: How speech sounds are made (e.g., children must learn how to produce the "r" sound in order to say "rabbit" instead of "wabbit").
- **Voice**: Use of the vocal folds and breathing to produce sound (e.g., the voice can be abused from overuse or misuse and can lead to hoarseness or loss of voice).
- **Fluency**: The rhythm of speech (e.g., hesitations or stuttering can affect fluency).
I would add that the easiest way to remember the distinction between “speech” and “language” is to remember that language = what we say, and speech = how we say it.

People studying books about speech and language or talking with a speech and language pathologist usually face a terminology that seems to be jargon. For that reason, I would like to begin this guide by explaining some of the most common terms, which are useful in daily life working with children with speech and language disorders, and try to simplify them and make them intelligible. These terms include the following.

- **Phonology**: “the categorization of the sounds of the language” (Lahey, 1988, pp.11).

- **Morpheme**: “the smallest segment of speech that carries meaning” (Lahey, 1988, pp.13). For example, at the word “oranges” -s is a morpheme because it conveys a meaning. It is the meaning of the plural. If we wanted to talk morphologically about this example, we would say that a child, who does not use –s to indicate the plural, has not acquired yet the morpheme of plural.

- **Semantics**: the study of the meaning of words. Vocabulary is the body of semantics. A child with difficulties with semantics shows difficulties with words with abstract and multiple meanings, synonyms and antonyms, figurative language etc

- **Pragmatics**: the study of how people use language to communicate. The rules we
follow in our communication. A child with difficulties with pragmatics shows difficulties to initiate a conversation, to maintain a conversation, to take turns in dialogue, to have an eye contact, to comprehend spoken language, to use appropriate language for time, space and the person s/he talks with.

**Typical Speech and Language Development**

In this section, I will provide general characteristics of children of multiple ages, related to hearing and understanding as well as to talking. This section is taken from American Speech and Hearing Association, which is the most appropriate and reliable to give us information about typical speech and language development.

**Birth-3months: Hearing and Understanding:**

- Startles to loud sounds
- Quiets or smiles when spoken to
- Seems to recognize parental voice and quiets if crying
- Increases or decreases sucking behavior in response to sound

**Talking:**

- Makes pleasure sounds (cooing, gooing)
- Cries differently for different needs
- Smiles when sees parent
4-6 Months: Hearing and Understanding

- Moves eyes in direction of sounds
- Responds to changes in tone of voice
- Notices toys that make sounds
- Pays attention to music

Talking

- Babbling sounds more speech-like with many different sounds, including \( p, b \) and \( m \)
- Vocalizes excitement and displeasure
- Makes gurgling sounds when left alone and when playing with parent

7 months-1 years: Hearing and Understanding

- Enjoys games like peekaboo and pat-a-cake
- Turns and looks in direction of sounds
- Listens when spoken to
- Recognizes words for common items like "cup", "shoe," or "juice"
- Begins to respond to requests (e.g. "Come here" or "Want more?")

Talking

- Babbling has both long and short groups of sounds such as "tata upup bibibibi"
- Uses speech or noncrying sounds to get and keep attention
- Imitates different speech sounds
• Has one or two words (bye-bye, dada, mama), although they may not be clear

1-2 years: *Hearing and understanding*

• Points to a few body parts when asked.
• Follows simple commands and understands simple questions ("Roll the ball," "Kiss the baby," "Where's your shoe?").
• Listens to simple stories, songs, and rhymes.
• Points to pictures in a book when named.

*Talking*

• Says more words every month.
• Uses some one- or two-word questions ("Where kitty?" "Go bye-bye?" "What's that?").
• Puts two words together ("more cookie," "no juice," "mommy book").
• Uses many different consonant sounds at the beginning of words.

2-3 years: *Hearing and Understanding*

• Understands differences in meaning ("go-stop," "in-on," "big-little," "up-down").
• Follows two requests ("Get the book and put it on the table").

*Talking*

• Has a word for almost everything.
• Uses two- or three-word "sentences" to talk about and ask for things.
• Speech is understood by familiar listeners most of the time.
• Often asks for or directs attention to objects by naming them.

3–4 years: Hearing and Understanding

• Hears voice when called from another room.
• Hears television or radio at the same loudness level as other family members.
• Understands simple "wh" (who, what, where, why) questions.

Talking

• Talks about activities at school or at friends' homes.
• Speaks clearly enough that people outside of the family usually understand his or her speech.
• Uses a lot of sentences that have four or more words.
• Usually talks easily without repeating syllables or words.

4–5 years: Hearing and understanding

• Pays attention to a short story and answers simple questions about it.
• Hears and understands most of what is said at home and in school.

Talking

• Makes voice sounds clear like other children's.
• Uses sentences that give lots of details (e.g., "I like to read my books").
• Tells stories that stick to topic.
Communicates easily with other children and adults.

Says most sounds correctly (except perhaps certain ones such as l, s, r, v, z, ch, sh, th).

Uses the same grammar as the rest of the family.


End of kindergarten: Listening

- Follow 1-2 simple directions in a sequence
- Listen to and understand age-appropriate stories read aloud
- Follow a simple conversation

Speaking

- Be understood by most people
- Answer simple "yes/no" questions
- Answer open-ended questions (e.g., "What did you have for lunch today?")
- Retell a story or talk about an event
- Participate appropriately in conversations
- Show interest in and start conversations

Reading

- Know how a book works (e.g., read from left to right and top to bottom in
English)

- Understand that spoken words are made up of sounds
- Identify words that rhyme (e.g., *cat* and *hat*)
- Compare and match words based on their sounds
- Understand that letters represent speech sounds and match sounds to letters
- Identify upper- and lowercase letters
- Recognize some words by sight
- "Read" a few picture books from memory
- Imitate reading by talking about pictures in a book

**Writing**

- Print own first and last name
- Draw a picture that tells a story and label and write about the picture
- Write upper- and lowercase letters (may not be clearly written)

End of 1st grade: Listening

- Remember information
- Respond to instructions
- Follow 2-3 step directions in a sequence

**Speaking**

- Be easily understood
- Answer more complex "yes/no" questions
• Tell and retell stories and events in a logical order
• Express ideas with a variety of complete sentences
• Use most parts of speech (grammar) correctly
• Ask and respond to "wh" questions (who, what, where, when, why)
• Stay on topic and take turns in conversation
• Give directions
• Start conversations

Reading

• Create rhyming words
• Identify all sounds in short words
• Blend separate sounds to form words
• Match spoken words with print
• Know how a book works (e.g., read from left to right and top to bottom in English)
• Identify letters, words, and sentences
• Sound out words when reading
• Have a sight vocabulary of 100 common words
• Read grade-level material fluently
• Understand what is read

Writing

• Express ideas through writing
• Print clearly
• Spell frequently used words correctly
• Begin each sentence with capital letters and use ending punctuation
• Write a variety of stories, journal entries, or letters/notes

End of 2nd grade: Listening

• Follow 3-4 oral directions in a sequence
• Understand direction words (e.g., location, space, and time words)
• Correctly answer questions about a grade-level story

Speaking

• Be easily understood
• Answer more complex "yes/no" questions
• Ask and answer "wh" questions (e.g., who, what, where, when, why)
• Use increasingly complex sentence structures
• Clarify and explain words and ideas
•Give directions with 3-4 steps
• Use oral language to inform, to persuade, and to entertain
• Stay on topic, take turns, and use appropriate eye contact during conversation
• Open and close conversation appropriately

Reading

• Have fully mastered phonics/sound awareness
• Associate speech sounds, syllables, words, and phrases with their written forms
• Recognize many words by sight
• Use meaning clues when reading (e.g., pictures, titles/headings, information in the story)
• Reread and self-correct when necessary
• Locate information to answer questions
• Explain key elements of a story (e.g., main idea, main characters, plot)
• Use own experience to predict and justify what will happen in grade-level stories
• Read, paraphrase/retell a story in a sequence
• Read grade-level stories, poetry, or dramatic text silently and aloud with fluency
• Read spontaneously
• Identify and use spelling patterns in words when reading

Writing

• Write legibly
• Use a variety of sentence types in writing essays, poetry, or short stories (fiction and nonfiction)
• Use basic punctuation and capitalization appropriately
• Organize writing to include beginning, middle, and end
• Spell frequently used words correctly
• Progress from inventive spelling (e.g., spelling by sound) to more accurate spelling

Speech and Language Disorders

Speech disorder is about not being able to produce phonemes correctly, or talk with fluency, or have difficulties with voice. In this section, I will define and discuss various kinds of speech disorders.

Articulation and Phonological Disorders: “Disorders of speech characterized by difficulty in producing speech sounds correctly; sounds may be omitted, distorted or substituted, a group of speech disorders that are not due to structural deviations or neuromotor control problems” (Hegde, 1996, p.75). Articulation and phonological disorders seem to be the same as their main characteristic is that the person does not use a phoneme appropriately. The distinction is that phonological disorders follow a pattern; i.e., there is always something in common in what kind of errors a person makes.

Stuttering: “A speech problem generally regarded as a disorder of fluency and rhythm…the final diagnosis based on multiple factors including the types, amounts, and the characteristics of dysfluencies, avoidance and negative emotions, and struggle and tension associated with dysfluent speech production” (Hegde, 1996, pp.380-381).
Voice disorders: “various disorders of communication related to faulty, abnormal, or inappropriate loudness, pitch, quality, and resonance; voice that does not help meet the social and occupational demands of communication; voice that deviates from expectations based on age, culture, or gender” (Hegde, 1996, pp.448).

Language disorder is about not being able to understand others or/and to express himself appropriately. When a child is assessed, we assess both receptive and expressive language. It is necessary to know his or her abilities in understanding and expression. The diagnosis is different when understanding is good and expression is delayed, or when understanding is delayed and expression is good, or when both are delayed.

“Language disorders in children: difficulty in learning to comprehend and/or produce semantic, phonologic, syntactic, morphologic and pragmatic aspects of language; deficient and/or inappropriate verbal behavior in children; found in a varied group of children, some of whom have associated clinical conditions (e.g., autism or mental retardation) and others who present no other conditions; 10 to 15% of 2-year-olds and 4 to 7.5% of 3-year-olds may have language disorders; may be subtle in some children; some residual problems in most treated children; some school-age children with language disorders may be classifies as learning disabled; associated with significant effects on social and academic behavior of children” (Hegde, 1996, pp.262).
**Literacy development**

It has been well established that children who do not develop typical language and literacy skills in their early years may not receive the required support or therapy, may have difficulties in developing further literacy skills, and may have difficulties with their whole academic performance as they progress to higher grades (Butler, 1999; Justice, Invernizzi & Meier, 2002; Shaughnessy & Sanger, 2005; Snow, Scarbough, and Burns, 1999). Lewis, Freebairn and Taylor (2000) examined children of preschool age: one group had expressive phonology disorder only, and the other group had expressive phonology disorder and other language disorders. The researchers examined the children again at third and fourth grades. The findings showed that the children with only expressive phonology disorder had made more progress compared to the children who had multiple speech and language disorders. Nonetheless, 50-90% of children who have expressive phonology disorder at preschool age continue to face difficulties with it and with learning achievement in the future, when they enter school. A screening protocol for early literacy skills should include attention to: written language awareness, phonological awareness, letter name knowledge, grapheme-phoneme correspondence, literacy motivation, and home literacy (Justice, Invernizzi & Meier, 2002).
There are a number of factors that can impact on the development of literacy skills and learning disabilities. One major factor is the use of phonics, which gives us the rules to decode a single word but can result in reading disabilities when a child has difficulties with the process (Berninger, Thalberg, DeBruyn, & Smith, 1987). In addition, a child may have the ability to decode words, but lack the ability to understand word meanings, sentence syntax and discourse structures, which can also result in reading disabilities that, are in this case, connected with context comprehension (Berninger, Thalberg, DeBruyn, & Smith, 1987).

A number of studies have examined the effect of phonological awareness as an indicator of later reading ability, and found it to be significant compared to many other predictors (e.g., Hogan, Catts, and Little, 2005; Lonigan, Burgess, and Anthony, 2000; Roth, Speece and Cooper, 2002).

Phonological retrieval also seems to play a key role. Phonological retrieval difficulties become obvious when children exhibit word-naming difficulties. It is believed that the children know the words, but they face difficulties retrieving them phonologically. As stated by Catts and Hogan (2003, p. 230), “problems retrieving phonological information, in turn, could explain why many poor readers fail to develop fluent word recognition, especially in oral reading.”

Scarborough (1998, 2000) informs us that early oral language skills can predict early literacy skills, while variables such as receptive and expressive vocabulary and morphosyntactic production and comprehension predict later literacy skills. With reference to syntactic and semantic abilities, Share and Leikin (2004) “support the lexical/supralexical hypothesis proposing that higher order semantic-syntactic abilities
are primarily associated with text processing but only weakly, if at all, with lexical-level processing” (p.105).

Word and sentence repetition were identified as key factors that can differentiate children who are poor readers with language impairments from those who are poor readers without language impairments (Kamhi and Catts, 1986). A study affirmed that the most predictive aspects of language for later reading skills are phonological processes and broader oral language skills that phonological short-term memory is very significant for reading, and that verbal fluency in early language is a very good predictor of later reading as well as grammatical skills and vocabulary (Hayiou-Thomas, Harlaar, Dale, and Plomin, 2006).

**Data from mini-research project**

As described in earlier chapters, the purpose of this research project was to discover the kinds of information that teachers wished to have about children’s speech and language development, and about the nature and symptoms of speech and language disorders often found in a classroom. The purpose of this guide, then, was to provide that information, which is described in the preceding paragraphs about speech and language development from birth to end of 2nd grade.

In addition to this more general information, participants also requested additional information about several topics, including the following:

- simple means of intervention;
- examples of normal vs. pathological oral language;
- activities to prepare children for the 1st grade;
• suggestions for consulting with parents;
• factors influencing the development of oral language difficulties; and
• bibliography of references on speech and language development and pathology.

In response to these requests, the following information is provided for each disorder.

**Simple means of intervention**

Suggested means of intervention are provided with respect to four common disorders, including articulation/phonological disorders, stuttering, voice disorders, and language disorders.

**Articulation/Phonological Disorders**: The teacher needs to be a good model for the child. S/he needs to speak clearly and correctly and always have his/her mouth visible to the child. They need to be face-to-face and at the same level, so the child is able to watch the teacher’s mouth. The teacher needs to correct the child when the child makes mistakes about a phoneme to help the child acquire awareness of his/her difficulties and of repair strategies. The teacher must be careful not to overcorrect, especially in front of other students.

**Stuttering**: The teacher needs to give time to the student to overcome his/her difficulties and speak. It is not appropriate for the teacher to speak on behalf of the student, continue what s/he thinks the child wanted to say, look somewhere else, laugh, or change the topic of conversation when a student is blocked and has a stuttering moment. The teacher needs to wait and show understanding, so that s/he helps the student to relax and overcome the difficulties.
Voice disorders: The teachers should advise the student not to speak loudly, not to try imitate the voice of others or environmental sounds, not to whisper, and to drink much water.

Language disorders: The teacher should be very careful about the way s/he speaks to the student. S/he must not use difficult sentences in terms of syntax and vocabulary, because the student will not be able to understand. The teacher should always speak one step above the student’s level; so that the student is able to understand and at the same time have the right model to imitate to go one step further in his/her development. For example, if the child says “water”, when s/he drinks water; the teacher should say “Well done! Drink water”.

Examples of normal vs. pathological oral language

With respect to this question, I would say that examples of normal oral language are provided earlier in this guide, in the section on typical speech and language development for each age. If a child lacks many of the elements typical for his/her age, we could say that it is pathological. Related to this question was another asking about oral language difficulties, including examples, identification, and the nature of the corresponding written language. For instance, if a child says “wabbit” instead of “rabbit” and generally uses /w/ instead of /r/, then probably this is an articulation disorder and the written language will be like the oral language, which means s/he will also write “wabbit” instead of “rabbit”. Generally, written language is always like oral language. If a child makes a mistake in oral language, s/he will do the same in written language. Written language is the mirror of oral language.

Activities to prepare children for the 1st grade
As far as activities to prepare children for 1st grade, with respect to written language
I would suggest that teachers need to be sure that children can do what they are supposed to
do by the end of kindergarten. These essential skills are summarized below.

According to research, there appear to be three parameters of reading that are acquired from a very young age and come together later to result in a good reader: the written code, the message to be understood, and the reader’s purpose. These parameters provide us with a guide about exactly what children should be able to do at different ages. These three parameters are described aptly by Snow, Scarborough, and Burns, 1999 (p. 49) as: “Reading as a cognitive and psycholinguistic activity requires the use of form (the written code) to obtain meaning (the message to be understood), within the context of the reader’s purpose (for learning, for enjoyment, for insight).” The following detailed description of these parameters and the skills involved in them is derived from a number of studies, but is structured primarily according to the arguments presented by Snow et al. (1999).

A three-year-old starts with the purpose of the reading by being exposed to different reading opportunities. S/he can understand that reading is used for different functions such as communication, knowledge, and information. S/he also acquires basic rules of reading such as read from front to back, from left to write and look where letters are appeared not pictures (Justice, Invernizzi & Meier, 2002). It is a usual phenomenon of this age to see children “pretending” to read a tale, pointing to the letters with their little fingers and saying their scenario of the story. They have understood that all these symbols mean something that you can express orally and give you a story. Olofsson and Niedersøe (1999) expressed a very interesting thought about the children of this age, which is “knowledge of nursery rhymes acts as an indicator of the child’s basic language development. That is, a child with enough talent for appreciating phonological structure will find it interesting and amusing to engage in nursery rhymes and language play and thus learn more rhymes” (p.470).

A four-year-old starts realizing the internal structure of words like syllables and phonemes and learning to write letters and their names. This seems to be a very important factor for future literacy skills since the children, who do not have expressive and/or language disorders at this age, may have literacy difficulties if they have letter knowledge delayed development from this age until they go to school (Lyytinen, Eklund, & Lyytinen, 2005). They also learn new vocabulary which will support text comprehension later.

Children of kindergarten age start realizing how the alphabetic system works. Often times, they can read short words with assistance. Finally, they can understand long and complex
texts. Letter knowledge and phonological awareness at this age of five years old are the two predictors of later reading skills (Carroll, 2007), while word retrieval and oral definitions in kindergarten seem to be the two predictors of reading comprehension in second grade (Roth, Speece and Cooper, 2002).

If children are not able to do these things while in kindergarten, teachers have to help them to acquire all these skills.

Suggestions for consulting with parents

It is not surprising that participants asked for suggestions about how to talk with parents about their child need to be seen by a specialist. Parents oftentimes have trouble accepting that their child needs to have therapy. Teachers have to be sensitive with these issues and show understanding about parents’ psychological conditions. On the other hand, they need to help parents understand that asking for assessment of their child as soon as possible would ensure the best progress for them. Teacher need to be sure that: parents understand their child’s difficulties; the sooner they seek intervention, the better off their child will be; and intervention by a specialist is ultimately accepted.

Factors influencing the development of oral language difficulties

Participants wanted to know which factors might influence the development of oral language difficulties in children—e.g., are they psychological, environmental or familiar. I would say that an environment which lacks a variety of inputs may not help a child to acquire typical speech and language. This means, that the family, which is the immediate environment of a child, can play a significant role at the development of speech and language. In addition, if a child has a “bad” speech and language model at his environment, s/he may be influenced. For example, if a child does not articulate the /r/
phoneme and so does the father, we are almost certain that it is about imitation of a “bad”
model

Bibliography of references on speech and language development and pathology

Last but not least, participants asked for a Greek bibliography about this topic. My research on the Internet came up with the following links which suggest many different books about special education and related topics.

http://www.ypepth.gr/el_ec_category1473.htm

http://www.fa3.gr/eidiki_agogi/19-BIBLIA-EID-AGOG-DIMOTIKOU.htm

http://books.phigita.net/isbn/9789608396067

http://www.atrapos-editions.gr/_KatPeriex/index.asp?_KatId=1

The first and second links are from the Ministry of Education, which suggests some books for teachers about special education, oral language, mental skills and child development. The third and fourth links are from advertisements for books about various topics of oral and written language difficulties. I believe that teachers could find useful information there. The sites have an abstract for each book, so they can read it priorily and know if it is something interesting for them or not.

Summary

In conclusion, I would like to add that the teachers’ role in the educational system is substantial. Teachers need to be aware that there are some children who are different from others and need help. These are children with speech and language disorders that can affect the development of literacy skills. Teachers need to know the basic things about speech and language, speech and language development, speech and language disorders and how they
affect the development of literacy skills. In this way, they will be better able to help students to accept therapy early, when the greatest progress is possible.

APPENDIX B

Consent Form

Committee for the Protection of Human Subjects, CSUMB
CONSENT TO PARTICIPATE IN RESEARCH

Title of Project: "What primary grade teachers need to know about speech and language."

We would like you to participate in a research study conducted by Evanthia Argyriou, Graduate student of Master’s Degree in Education with emphasis in Special Education at the Department of Education to be used for thesis at California State University, Monterey Bay with the guidance of Dr.Irene Nares-Guzicki, Professor and thesis advisor at the Department of Education.

The purpose of this research is to construct a guide for teachers as referred to speech and language development, speech and language disorders, and how they affect the development of literacy skills. We would like you to express your opinion about what information you would like us to include in this guide.

You were selected as a participant in this study because you are a teacher of preschool, kindergarten, 1st or 2nd grade, or working with children from preschool to 2nd grade level. The benefit of participating in this project is that you help us construct a useful and helpful tool for teacher’s community.

If you decide to participate in this research, you will be asked to take part in an interview with approximate duration of 1 hour.
Any information that is obtained in connection with this study and that can be identified with you will remain confidential and will only be disclosed with your written or witnessed verbal permission or as required by law. Your actual name will not be used, but rather pseudonyms will be used instead. The researcher will keep a list of the actual names in case there is a need for follow-up information. This information will be kept in a locked file cabinet in the Department office at CSUMB.

Taking part in this project is entirely up to you. You can choose whether or not to be in the study. If you volunteer to be in this study, you may withdraw at any time without consequences of any kind. You may also refuse to answer any questions you do not want to answer and still remain in the study.

If you want to know more about this research project or have questions or concerns, please call at 582-3639, or Dr. Irene Nares-Guzicki at 582-5081 or send an e-mail at Evanthia_Argyriou@csumb.edu. The project has been reviewed and accepted by California State University, Monterey Bay. You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights or remedies because of your participation in this research study.

If you have questions about CSUMB’s rules for research, please call the Committee for Human Subjects Chair, Chip Lenno, CSUMB Technology Support Services, 100 Campus Center, Building. 43, Seaside CA 93955, 831.582.4799.

You will get a copy of this consent form. Thank you for considering participation.

Sincerely,
Evanthia Argyriou, Graduate student MAE

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**Consent Statement**

I understand the procedures described. My questions have been answered to my satisfaction and I freely agree to participate in this study. I know what I will have to do and that I can stop at any time.

I have been given a copy of this Consent Form.

______________________________  ________________________
Signature                                      Date
Signature of Researcher

In my judgment, the participant is voluntarily and knowingly giving informed consent and possesses the legal capacity to give informed consent to participate in this research study.

_________________________________________  _______________________
Signature of Researcher                      Date