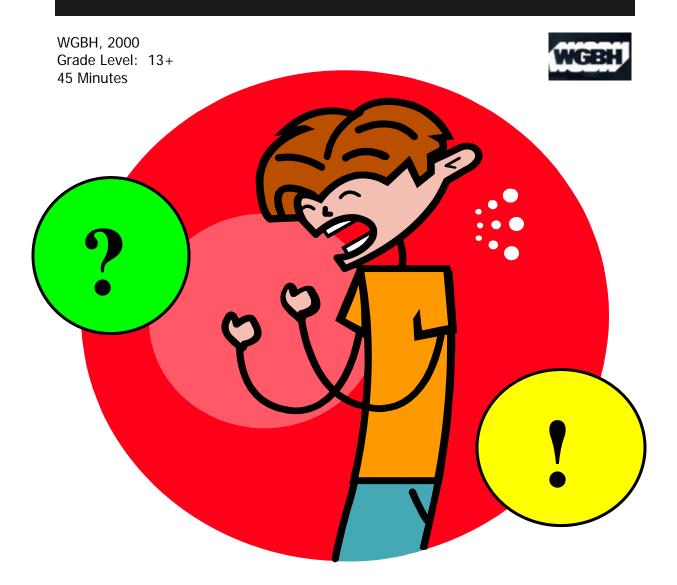
#10669 **LANGUAGE**



CAPTIONED MEDIA PROGRAM RELATED RESOURCES

#9891 MISUNDERSTOOD MINDS #10668 GETTING THOUGHTS ON PAPER #10670 MASTERING THE CHALLENGE OF READING

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About the Developing Minds Video Library



The Developing Minds multimedia library features the work of All Kinds of Minds, a private non-profit Institute, affiliated with the University of North Carolina at Chapel Hill. All Kinds of Minds offers a broad range of programs and resources that enable parents, educators, and clinicians to help children and adolescents with differences in learning achieve success in school and life. The Institute was co-founded by Dr. Mel Levine, who for more than 25 years has pioneered innovative programs to enhance the understanding students' learning difficulties. neurodevelopmental model draws on research from a wide range of disciplines. A renowned developmentalbehavioral pediatrician, Dr. Levine is also Professor of Pediatrics at the University of North Carolina Medical School and Director of the University's Clinical Center for the Study of Development and Learning.



Developing Minds is a library of 22 videotapes with accompanying guides. The library is designed to help parents and teachers of elementary and middle-school children explore differences in learning through the approach and conceptual framework of developmental-behavioral pediatrician, author, and professor Dr. Mel Levine.

The heart of the collection, which features children and early adolescents with diverse learning profiles, is divided into *theme* and *construct* videos. The eight theme videos focus on children's struggles and successes with skills such as reading, writing, and mathematics as well as difficulties in communication, understanding, organization, feelings, and behavior. The eight construct videos begin where the theme videos end, illuminating breakdowns in such key areas of brain function as attention, memory, language, neuromotor, social cognition, temporal-sequential ordering, spatial ordering, and higher order cognition.

Dr. Levine guides viewers through the videos as he and other experts, teachers, parents, and children provide commentary and strategies. Together, the videos and print guides promote an understanding of learning differences—strengths and weaknesses—and strategies that help children become successful learners. This material also gives parents and teachers a common language to advance effective communication between home and school.



Theme Videos

Present the learning problems and successes of children and early adolescents (40–60 minutes each)

- Mastering the Challenge of Reading
- Getting Thoughts on Paper
- Thinking with Numbers
- Understanding
- Student Output: Producing, Performing, and Communicating
- Getting Organized/Work Habits
- Feelings and Motivation
- Behavioral Complications



Construct Videos

Provide deeper insight into specific neurodevelopmental breakdowns that contribute to differences in learning (30–60 minutes each)

- Attention
- Language
- Neuromotor Function
- Memory
- Social Cognition
- Temporal-Sequential Ordering
- Spatial Ordering
- Higher Order Cognition

Developing Minds

How to Use

Together, this video and guide can be used to increase awareness and gain a deeper understanding of problems that many children face when they are asked to comprehend language they hear or read as well as communicate orally or through writing. The video is organized into five levels of language development: *phonological processing; morphological sense; semantic understanding and use; sentence comprehension and formulation;* and *discourse.* Scenes feature children in classroom settings struggling with language weaknesses in each of the levels. Dr. Mel Levine and teachers offer practical suggestions to help children address a variety of difficulties with language.

The structure of the guide is similar to the video, with information on each level of language development as well as a section, Explore the Video, that highlights scenes of children struggling with each level of language development. In addition, the guide provides a glossary of terms used in the video, a checklist of signs of language problems, a brief background article on language, and resources for further information.

There are many ways to use these materials, including watching the video alone, working with a partner, participating in a teacher or parent study group, or using the video and guide at a parent-teacher association gathering. However you choose to use them, these materials will provide insight into important language difficulties that children experience. The Viewing Tips on page 7 offer key questions to reflect upon after watching.

Video Library Overview

Management by Profile Videos

Introduce a systematic process for developing an individualized educational path based on a child's neurodevelopmental strengths and weaknesses; A Student Profile showcases a child as he moves through the process (20–30 minutes each)

- Strategies for Parents
- Strategies for Teachers
- A Student Profile

Introduction Videos

Provide a brief description of the video library components; the Parents' and Teachers' videos also introduce the philosophy and approach of Dr. Mel Levine (10–20 minutes each)

- Video Library Overview
- Introduction for Parents
- Introduction for Teachers

Tips for Using

- Scan the guide and read the introduction and background article. Watch the entire video, then rewatch it, using sections of the guide to reinforce what you see.
- To find information that addresses your needs, go directly to a particular section of the guide, such as Explore the Video, or refer to the guide alone.
- Begin exploring the video library with Language for an overview of the topic. Then watch related theme tapes, such as Mastering the Challenge of Reading, Getting Thoughts on Paper, Understanding, and Student Output for information on how difficulties with language can affect learning.



Introduction

"The phrases and the words they used, like "pay through the nose," I think one of them was, I just hadn't ever heard anybody talk like that, I'm just used to people using regular expressions and phrases."

-Caitlin, fifth grade student

"I'll say something in the classroom and Caitlin won't quite get it and I'll have to repeat it in a different version. And sometimes that might take me two or three times when we're discussing things."

—Ms. Shirrod, fifth grade teacher From the playground to the classroom to the dinner table, language is at the core of most learning and human interaction. The ability to understand and produce language effectively is critical for children to succeed in both academic and nonacademic settings.

There are two basic forms of language, *receptive* and *expressive*. Receptive language involves interpreting and comprehending incoming information that is heard or read. Expressive language involves communicating orally and in written form. Children can experience difficulties with one or both of these forms of language.

Dr. Mel Levine and other researchers have identified five critical levels or elements of language development that are equally important in supporting expressive and receptive language skills. These five elements are *phonological processing; morphological sense; semantic understanding and use; sentence comprehension and formulation;* and *discourse*. These elements work together in a highly coordinated way in both receptive and expressive language. To help children who struggle with language, it is important to recognize where their breakdowns are occurring, then develop appropriate interventions and accommodations. Dr. Levine says, "We need to take a fresh look at every individual, particularly kids who are struggling, and in a sense audit those different levels of language, in terms of their receptive and their expressive components, and get a sense of where the strengths and weaknesses are within language."

Phonological Processing

The first element of language function involves the sounds that make up words. In the English language, there are approximately 44 sounds that become the building blocks of words. A child's ability to process and consciously appreciate the individual sounds in a language is called "phonological awareness."

The ability to process, distinguish between, and manipulate speech sounds forms the phonological core of language. Children who understand that language is made up of speech sounds will be better equipped to become fluent readers and spellers.

Morphological Sense

The second element of language involves understanding the individual units that contribute to the meaning of a whole word. A morpheme is the smallest unit of meaning in language. Although morphemes have meaning, they do not necessarily take the form of words. Morphemes are often parts of words, such as roots, prefixes, suffixes.

When children build a strong morphological sense, they are able to put word parts together and take them apart. This understanding of how words are built provides a foundation for spelling and assists children with comprehending what they hear and read.

"I think that whether we like it or not, schools are designed for linguists. Schools are really custommade for children with good verbal abilities."

—Dr. Mel Levine

Semantic Understanding and Use

In the third element of language, children develop a clear understanding of words and their meanings. They make connections between words and understand how words relate to each other. Children who are successful at school do not necessarily have a larger vocabulary than their classmates, but they have a deeper understanding of the words that they use.

Semantic demands grow as children continue through school. By middle school, they are inundated with "literate language"—words such as *hypotenuse* or *calibrate* that come up in subjects like math and science—in contrast to "automatic language," words used in everyday conversation. As they progress through school, children must gain proficiency with increasingly complex vocabulary to be successful.

Sentence Comprehension and Formulation

The fourth element, understanding and formulating sentences, involves syntax, or knowing the ways in which word order and grammar affect meaning in sentences. Sentence comprehension contributes significantly to reading comprehension. It is also essential for understanding questions and directions in school or at home.

Children's ability to construct sentences is also critical to success in writing. Appreciation and understanding of word order and grammar relate directly to both spoken and written sentence comprehension and formulation.

Discourse Processing and Production

The fifth element of language goes beyond sentences to extended forms of both written and spoken communication, such as paragraphs, passages, stories, chapters, textbooks, and novels. Memory becomes very important at this level because the child needs both to process the information and hold it in memory long enough to draw meaning from it.

Discourse becomes increasingly important as children progress through school, as concepts become more complex, and as listening and writing expectations become more demanding. This element of language is critical for elaborating or expanding an idea orally or in writing.

Children may show uneven language development as they work through the five elements of language. A child may do well with phonological processing but not with semantic understanding and use, or may have strong skills at the sentence level but have difficulty at the discourse level. With appropriate interventions and accommodations, children will be better equipped to build on understanding the sounds that correspond with letters or letter patterns, developing individual vocabularies, and eventually creating sophisticated ideas.

Language Diagram

This diagram offers a representation of the levels of receptive and expressive language presented in the video.

Morphological Sense • knowing that units within words (e.g., prefixes, suffixes) **Phonological** Semantic have meaning **Understanding Processing** knowing that changing a unit and Use of a word can change the • knowing that words have sounds in them such as meaning knowing the meanings of words "sh" or "tr" · connecting the different parts of • knowing that the same word words to spelling distinguishing between can have different meanings sounds • understanding how words • manipulating sounds relate to each other understanding nuances of words **LANGUAGE Sentence Discourse Processing** Comprehension and Production and Formulation • understanding the meaning of understanding how word order paragraphs, passages, or chapters and grammar affect meaning • generating cohesive written or oral stories generating cohesive written or oral sentences · summarizing thoughts · combining, expanding, and expanding ideas rearranging sentences

Viewing Aids

The **Glossary** and **Signs of Language Problems** explain concepts presented in the video. Refer to them as you view the video, or afterward when reflecting on how you might help a particular child.

Language

Glossary

accommodations: adjustments to tasks that work around a child's neurodevelopmental differences or weak skills; sometimes referred to as bypass strategies

automatic language: the language of everyday conversations (as opposed to literate language)

concrete language: language that refers to things you can see, hear, touch, smell, or taste

demystification: the process of helping children understand—and have the terms necessary for coping with— their learning strengths and weaknesses

discourse: spoken or written language that goes beyond the boundaries of individual sentences, such as paragraphs, passages, and lectures

dysfunction: breakdown in any neurodevelopmental process; for example, not having enough mental energy to complete a task

expressive language: the ways in which thoughts are communicated in speaking or writing

inference drawing: the ability to supply missing information in language

literate language: the language of school subjects (as opposed to automatic or everyday language)

morphemes: the smallest units of language that have meaning (e.g., prefixes, suffixes, tenses)

neurodevelopmental functions:

brain-based processes needed to acquire and produce knowledge, skills, and approaches to learning

phonological awareness: the ability to consciously appreciate and manipulate the sound system of one's language—critical for reading and spelling

phonemes: the individual sounds of a given language

pragmatics: comprehension and use of language in social contexts

receptive language: the ability to process and comprehend language

semantics: knowledge of words and their meanings

semantic network: the collection of words and word meanings that are interconnected in a person's mind

sentence formulation: the ability to put thoughts into grammatically correct and meaningful sentences

symbolic language: understanding/use of figurative and abstract conceptual language

syntax: the rules of sentence construction, e.g., word order, grammar

verbal elaboration: the process of extending ideas through language use

verbal memory: storage and retrieval of language (e.g., phonemes, sentences, passages)

word retrieval: rapidly finding and using specific words when needed

Signs of Language Problems

Phonological Processing

- difficulty perceiving and producing (i.e., articulating) language sounds
- difficulty with phonemic segmentation or the ability to discern the individual sounds that compose a whole word
- little appreciation or understanding of rhyming and alliteration

Morphological Sense

- difficulty understanding how prefixes and suffixes work
- difficulty interpreting and using word inflections and intonations
- poor spelling
- poor vocabulary acquisition

Semantic Understanding and Use

- rigid, superficial, and limited grasp of word meanings
- limited vocabulary
- difficulty with word retrieval
- difficulty with words that have multiple meanings or specific nuances
- slow to incorporate new vocabulary and to fit new words within a semantic network
- · poor reading comprehension

Sentence Comprehension and Formulation

- difficulty with sentence comprehension
- difficulty in formulating grammatically correct sentences
- overuse of simple declarative statements
- difficulty learning rules and regularities of grammar
- word omissions, absent word endings, and errors of agreement in writing

Discourse

- difficulty keeping up with extended discussions or lengthy lectures
- difficulty processing and remembering lengthy text
- short, unelaborated communication
- difficulty organizing ideas in a logical sequence
- problems with summarization

Explore the Video

Go to these scenes to reinforce what you see in the video or to focus your discussion.

Phonological Processing

1. Ms. Swanek uses a game to teach young children that words are made up of sounds.



She teaches sound and letter correspondence by:

- using cut out letters that children can manipulate easily
- asking children to change a word by rearranging letters
- having children build a word by adding letters
- **2.** Sarah exhibits difficulty with spelling accuracy, putting in extra letters that do not belong in a word.



Her teacher:

- verbalizes each syllable in the longer word Sarah is trying to spell
- helps Sarah realize there will be a vowel in each syllable of a word
- spells each syllable of the word on a chalkboard with Sarah as she sounds it out

Morphological Sense

1. Brittany struggles to read a two-syllable word and tends to say the chunk of the word she does know.



Ms. Yelverton, the reading specialist:

- focuses Brittany's attention on the prefix "a"
- helps her pronounce the word correctly by blending the two morphemes
- asks her to clarify the meaning of the sentence once Brittany understands the word is "away and not "way"
- **2.** Ms. Adolph uses a building block approach to practice morphology and help improve spelling.



To help Kristina understand word patterns and rules, she:

- has Kristina identify and then spell the base word of "sadder"
- asks her to change the ending on different words to change their meaning
- reviews how words are put together
- asks Kristina to explain the spelling rule she used when adding a new ending to the base word "mean"

Viewing Tips

- Watch the entire video to get a sense of the concepts and issues presented. Then watch the parts that interest you again.
- View the video with a partner or in a small group, then discuss it. Consider the following questions: How do problems with language affect a child's academic and nonacademic performance? Which strategies are effective for helping students become more efficient in their use of receptive and expressive language? Are there any strategies you might want to try?
- Watch the video with a child who has language challenges, then discuss your reactions. Have siblings watch the video to gain understanding of their brother's or sister's difficulty with language.

"Those students who are trying to get through school with insufficient language resources really have their work cut out for them, day after day, wherever they go. So much meaning is conveyed through language."

-Dr. Mel Levine

Semantic Understanding and Use

1. Ms. Adolph develops children's semantic understanding in her vocabulary lessons.



In one of these lessons, she has her students:

- find the target vocabulary word
- read the sentence containing the word to help make sense of it
- find the definition of the word using the dictionary
- write down the word and its definition
- draw a picture and write a sentence correctly using the word

"I was surprised when I started doing this with my children because it taught me so much . . . Children that I thought really knew how to put the words together, when I gave them the single letters a lot of times, they were unable to do that."

—Ms. Swanek, first grade teacher **2.** Teachers can create exercises that feature discussing words and their meanings, including the meanings of idioms.



In this class, the teacher works with one child to:

- not automatically take phrases like "pay through the nose" at face value but to derive their meaning from context
- point out the nuances of an idiom like "egg on his face"

Sentence Comprehension and Formulation

1. Marcus displays syntax difficulties in his written work.



His teacher describes his writing assignments as:

- lacking cohesion
- having word orders that don't make sense
- containing spelling and grammar errors
- being made up of sentence fragments and run-on sentences





Dr. Levine helps build Nick's ability to orally formulate sentences by having him:

- use a random list of words to come up with a grammatical sentence
- combine or rearrange the words to form a meaningful sentence
- revise his answers and give complete sentences
- notice how the grammar of a sentence affects its meaning

Language

Discourse Processing and Production

1. Mr. Robinson uses several different approaches to encourage more elaborate verbal expression from his class.



He has created an environment where children feel safe to try by:

- never calling on someone out of the blue, but asking for volunteers instead
- having children raise their hands, which gives children with expressive language difficulties time to formulate what they want to say
- breaking the class into smaller groups, where a more reticent child may feel safer about sharing an idea out loud
- 2. Ms. Jensen develops children's discourse skills during class discussions.



Her approach includes:

- having students summarize their thoughts on a certain topic
- asking questions to encourage students' elaborative thinking
- encouraging a student to draw upon personal experience
- having students defend their opinions

Home and School Collaboration

"I think at home and in school, children need a lot of experience playing word games (Scrabble®, crossword puzzles). They need to be helped to really talk about word meanings, to develop what are called semantic maps, which are diagrams of different words that include connections between words. What we really hope will happen is we want every kid to develop a fascination with words."

—Dr. Mel Levine

Living with or teaching a child who has difficulty with language can be an emotionally charged experience. Frustration and confusion can complicate the conversation between parents and teachers about what to do. Showing respect for each other and communicating openly can reduce tension and enable parents and teachers to benefit from each other's expertise and different perspective of the child. Working together, parents, teachers, and the children themselves can inform one another how to best address the child's needs.

Parents and Teachers Communicating about Language

When you suspect a language problem, schedule a parent-teacher meeting to share information about the child. The following "talking points" can help structure the discussion.

Share observations of the child's profile of language abilities and discuss where the breakdown is **occurring.** What are the worries or concerns? Does the child have difficulty with expressive and/or receptive language? What elements of language development seem to be problematic? Is the breakdown occurring in phonological awareness, morphological sense, or sentence comprehension?

Identify and discuss the child's **strengths and interests.** Are the child's interests being used to support and encourage language development? Find ways to use the child's interests and strengths to improve performance in areas of weakness. For a child with expressive language difficulties who is interested in butterflies, locate a related book, article, or television program to share and discuss. Then, encourage the child to build on this interest to write a report, give an oral presentation, or take family members or classmates on a butterfly identification walk.

Clarify the instructional program.

For example, if written production is a problem, review the approach to writing that is used in the classroom. Examine possible accommodations, such as small

group or individualized instruction. Evaluate how the approach is working for the child.

Acknowledge emotional reactions to the situation. Discuss how children who struggle with language—especially expressive language—can become frustrated. Unable to readily put their thoughts into words, these students often don't participate in class and fail to respond correctly when called upon. Share strategies that might help children feel more comfortable in class and provide opportunities for success.

Discuss appropriate next steps.

Establish a plan for ongoing discussion and problem solving. How will expectations and progress be shared? Should the child be evaluated by a speech-language pathologist? How can you best advocate for the child?

When a problem with language has been specified:

- Learn more about the school's instructional approach and the topic from experts, reference books, and Web sites. (See Resources on page 19.)
- Seek assistance from colleagues and experienced parents through support groups and organizations.
- Request that the school's special education teacher or speech-language pathologist observe the child, then consult with you on strategies to use in the classroom and at home.
- Investigate the availability of professional help from pediatricians and others.

Talk

Talking with Children about Their Strengths and Weaknesses

"In the adult world, what really counts is how strong your strengths are, not how weak your weaknesses are." —Dr. Mel Levine

It can be difficult to discuss language issues with children who have language problems. Some children will not be able to explain the challenges they are experiencing, while others may exhibit behavior problems because they are frustrated. Dr. Levine suggests using a process called demystification, which through open discussion with supportive adults, helps children learn to put borders around their difficulties and appreciate that, like everyone else, they have strengths and weaknesses. This process creates a shared sense of optimism that the child and adult are working toward a common goal, and that learning problems can be successfully managed. The following suggestions can help you demystify children's difficulties with language.

Eliminate any stigma. Empathy can reduce children's frustration and anxiety about their language difficulties. Emphasize that no one is to blame, and that you know they need to work harder than others to learn or communicate ideas through language. Explain that everyone has differences in the way they learn and demonstrate their learning. Reassure children that you will help them find ways that work for them. Share an anecdote about how you handled a learning problem or an embarrassing mistake.

Discuss strengths and interests. Help children find their strengths. Use concrete examples, but avoid false praise. To a child who can tell a story well, you might say, "I like the way you can tell a story with lots of details." Identify books, videos, Web sites, or places in the community that can help children build on their strengths and interests.

Discuss areas of weakness. Give concrete examples of when and how language is breaking down. Contrast language breakdowns with areas that work well. For example, you might say, "You seem to have difficulty understanding the teacher's multistep directions when they are given all at once. You are better at understanding directions when they are written down."

Emphasize optimism. Help children realize that they can improve—they can work on their weaknesses and make their strengths stronger. Point out future possibilities for success given their current strengths. Help children build a sense of control over their learning by encouraging them to feel responsible for their own progress. A child who has language difficulties while reading can plot his progress towards completing an entire book to help build self-confidence.

Identify an ally. Help children locate a mentor—a favorite teacher, an adolescent, or a neighbor—who will work with and support them. Explain that children can help themselves by sharing how they learn best. Older children can explain the strategies that work for them, while younger ones may need adult support. Encourage children to be active partners with their allies.

Protect from humiliation. Help children strengthen self-esteem and maintain pride by protecting them from public humiliation. Always avoid criticizing children in public and protect them from embarrassment in front of siblings and classmates. Don't ask a child who has difficulty formulating oral responses to answer out loud in class without providing advance notice and ample time.

Management by Profile

Demystification—helping children understand their neurodevelopmental strengths and weaknesses is part of Management by Profile, a process developed by Dr. Levine and All Kinds of Minds for managing the education of children with differences in learning. Teachers, parents, and the children themselves participate in developing a learning plan for the child that includes strengthening of strengths, accommodations, interventions at the breakdown points, and protection from humiliation.

For more information on Management by Profile, see the Management by Profile guide and the videos, Strategies for Parents, Strategies for Teachers, and A Student Profile.

Strategies to Try

Strategy Tips

Decide which strategies to try by observing the child and identifying the ways in which he learns best.

- It may take several attempts to see positive results from one strategy. Don't give up too soon.
- ••If the first few strategies you try do not improve the child's skills, try others.
- ••Most of these strategies can be adapted for use with different age groups.

You may use the strategies on the following pages to help children who are experiencing problems with language. Many of these strategies are accommodations—they work around a child's differences by offering alternative approaches. For example, a child with a weakness in literate language might benefit from having the key concepts and words of a lesson written on the board for ongoing referral. Other strategies are designed to specifically strengthen a weakness. For example, a child who has difficulty with word decoding can be taught word attack strategies. From the strategies suggested below, select those that you and the child think might work best.

General Strategies

Employ experiential approaches. Make use of field trips, films, and television to substitute for or supplement reading and lectures.

Use visual organizers. Use pictures, standard outline formats, story mapping diagrams, and flow charts to help children organize their thoughts.

Set priorities. Define criteria for success explicitly so children know where to devote their effort and energy, such as using a grading rubric.

Give advance warning of important information. Stop and give children advance warning that important information is about to be stated. Slow the speed of oral delivery, include pauses, and accentuate by intonation and gesture what is most important. Preview, repeat, and summarize important points at the end of a discussion.

Use small groups. Supplement lectures with small-group instruction and individual conferences.

Use projects. Allow children to do projects (e.g., models, scrapbooks, demonstrations, book illustrations, photography, pantomime, and mobiles) in place of written reports to demonstrate their understanding of important academic content.

Provide preferential seating. Children with language processing difficulties often benefit from being seated close to the teacher. The child should have an unobstructed view of the teacher and the board.

Provide extra texts. An additional set of textbooks in which children can write and make notations can be helpful.

Phonological Processing

Play listening games to strengthen sound discrimination. Engage children in listening games to identify specific sound patterns or discriminate same and different sounds in different parts of words. Instruct children to clap when they hear a word that has a particular sound (e.g., begins with, ends with, has a short or long sound, the same or different beginning and end, and/or middle sound). Teach children to break words into their smaller parts (e.g., syllables and individual sounds), focusing on what parts they hear.

Play sound manipulation games. For example, young children may enjoy learning and then speaking in pig Latin.

Play rhyming games. Instruct children to name as many words as they can that rhyme with "bat," or identify which two out of three words rhyme.

Reinforce sound-letter correspondence. Use flash cards for sound-letter drills.

Play matching games. Ask children to match the letter with a picture that has the same beginning, ending, or middle sound.

Create a dictionary. Have children make a picture-letter dictionary.

Use segmentation activities. Identify the number of syllables per word; the number of sounds per word; or the sounds heard at the beginning, end, and middle of words.

Use sound blending games. Have children put sounds together to form a word, or fill in missing sounds to create a word.

Use spelling exercises. Give children lists of words with missing letters. Then have them fill in the missing letters after hearing a spoken word.

Categorize. Have children categorize words according to word families, common letter patterns, and rules to help decoding and spelling.

Practice the rules. Give children extensive opportunities to practice applying phonetic rules, including locating examples and generating their own examples of words that follow specific rules. Also identify exceptions to rules.

Use computer games. Look for games that promote phonological awareness. Find games where presentation and response times can be adjusted.

Morphological Sense

Divide words. Model and teach dividing words into component parts (prefixes, suffixes, roots). Have children divide words into parts, give the meaning of each part, and then the meaning of the whole word.

Build words. Give children a root and a variety of prefixes and suffixes, and have them build as many real words as they can (e.g., play, playful, playing, replay, playfulness).

Use grouping activities. Have children group words by common roots.

Use card games. Play variations of card games like go fish or rummy in which children put word parts together to form meaningful words.

Semantic Understanding and Use

Use vocabulary drills. Create exercises that involve both literate language (technical vocabulary) and automatic language (everyday words) to enhance understanding and develop semantic networks.

Identify unknown words. Have children identify words that they have heard or read that they do not understand. Keep a running list of new vocabulary words in a notebook. Have children review the words regularly and use them in class discussions and writing to strengthen vocabulary and verbal expression.

Teach idioms and figures of speech. Help children decipher expressions and other figures of speech. Explicitly explain idioms and figures of speech when first encountering them in context. Have children find their own examples and make a booklet with possible meanings. Help them appreciate how context helps with understanding.

Play word games. Utilize board games such as Scrabble®, in which children form their own words, or ConcentrationTM, in which they match words to their meanings. Crossword puzzles also can be beneficial.

Use synonym/antonym/homonym activities. Introduce activities that require children to think about words that are the same, opposite, or have the same sound but a different meaning.

Create dictionaries. Have children develop a thesaurus or synonym dictionary that can be added to and used to enrich their speaking and writing.

Teach sentence types. Provide examples for sentences that serve the following purposes: define, restate, provide an example, compare/contrast, describe, summarize, and make an association. Ask children to find examples in their books.

Use sentence completion activities. Have children fill in a missing word to create a meaningful sentence. Provide exercises that employ a multiple-choice format.

succeeding at school don't necessarily have a larger vocabulary than their classmates. But many of them really know the meanings of the words they know. So it isn't necessarily how many words you know as it is how well you know the meanings of the ones you do know—and also how words connect with each other."

"Students who are really

-Dr. Mel Levine

Discuss sentence ambiguities. Have children figure out alternative meanings for the same sentence, or make up sentences that can have two meanings. Ask several children to restate the meaning of the sentence, "It is too hot to eat," to illustrate sentence ambiguity.

Play rapid picture naming and category naming. These activities are useful in developing fluency in word access and building vocabulary networks. Chart the number of items named in a specified time to show progress over time.

Sentence Comprehension and Formulation

Fill-in-the-blank. Use fill-in-the-blank exercises that emphasize use of context, or surrounding sentence, for verb tense, pronouns, and agreement.

Generate sentence completion/combination activities. Sentence combination exercises develop skills using conjunctions, cohesive ties, relative pronouns, and clauses.

Use areas of high interest and knowledge. Allow and encourage children to write and talk about things that interest them and that they know a lot about.

Employ editing and error-detection activities. Use checklists to help children edit their work. Text-to-speech software also can help children detect grammatical and syntactic errors in their writing.

Focus on the order of words. Compare sentences in which the words are the same, but arranged in a different order. Ask children if the sentences mean the same thing. For example:

My brother brought his pet lizard to the playground.

My brother brought his pet playground to the lizard.

My lizard brought his brother to the playground.

To the playground, my brother brought his pet lizard.

Use the buddy system. Assign a buddy to a child with sentence comprehension difficulties and allow the child to ask the buddy for assistance when she doesn't understand a direction or assignment.

Check for understanding. Check frequently with a child who has language processing difficulties and ask her to repeat the directions or explanation. Alternatively, check to make sure the child understands by observing her working.

Provide advance warning. When calling on a child with sentence formulation difficulties, it is often helpful to allow more time, or to give the child some advance warning that he will be asked to respond. For example, a child might be told that tomorrow he will be called upon in class to answer a particular question.

Use alternative texts at home. Provide texts with appropriate reading difficulty, simplified vocabulary, short sentences, and illustrations for children with significant language and reading difficulties.

"[His] writing is understandable in terms of spelling.... But in terms of grappling with concepts and ideas, it's kind of like he's gotten all these ideas into his brain... and then [they] just pour out in some way that's not necessarily very sensible."

—Suzanne Herko, middle-school teacher

Discourse Processing and Production

Explore discourse. Teach the different types of discourse that are commonly used in narrative and expository writing and their organizational structures: theme, plot, sequence of events; description; compare/contrast; cause/effect; question/answer; definition/answer; temporal sequence; definition/example. Have children locate samples and create their own written examples.

Use strategies to identify main ideas. Provide children with guidance in identifying main ideas and important supporting details. Teach note taking and semantic diagramming formats that emphasize the different text organization patterns.

Encourage verbal elaboration. Have children retell a story in their own words. Have them practice predicting the contents or outcome of a story or article based on the title, beginning, or ending. It is often helpful to have a child practice verbal elaboration by having him talk about something he already knows about.

Teach key words. Show how different types of essay questions are structured and teach key words that denote what is being asked for (e.g., compare, contrast, trace the development, describe, discuss, define and give examples). Give children examples of answers and have them practice writing each kind.

Teach transition words. Provide examples of transition words and phrases that create coherent, flowing discourse, such as "therefore," "meanwhile," and "on the other hand." Give children opportunities to evaluate writing samples based on the flow and understandability of the writing.

Use oral reporting. Demonstrate oral presentation skills and give children regular practice in oral reporting in low-risk settings. When ready, oral recitation (poetry, parts in plays, etc.) can help develop expressive fluency and presence.

Use outlines. Format outlines for reading notes, oral presentations, and writing (for example, who, what, where, when, and why).

Use video. Videotape a child having a conversation with a peer. Play back the tape in private, and let the child determine if what he said was understood by his companion. Ask him to identify what he might have said differently to enhance understanding.

Teach a strategic approach to listening, reading, and writing. Demonstrate and teach a step-by-step approach to learning with language. Possible steps for reading include preview, predict, activate prior knowledge, decide what to learn and make up questions for guidance, read/listen and take notes, summarize, self-test with questions, and review. Steps for writing might include plan, organize, write, edit/revise, and rewrite.

Use tape recorders. Allow the use of a tape recorder to record lectures and literature to support the oral/printed information. Children can review the tape for better understanding and for notetaking.

For more strategies to address weaknesses with language, refer to the Attention, Memory, Mastering the Challenge of Reading, Getting Thoughts on Paper, Understanding, and Student Output videos and guides in this library.

Background on Language

In school and in life, language is essential to communicating and understanding. It is the fundamental building block of reading and writing, and affects how children succeed even in areas not primarily associated with language, such as math. How well children use language influences how they relate to classmates and adults. Virtually everything a child does in school requires language.

Language

Dr. Mel Levine, of All Kinds of Minds, and others break language down into two areas—receptive language, or understanding incoming spoken or written information and expressive language, or communicating information by speaking or writing. Within these areas are five levels of understanding and using language. First, students must understand and distinguish among the sounds that make up language, a process called "phonological awareness." English consists of approximately 44 of such sounds, or phonemes such as "sh" or "u." A second level of language involves morphemes, which are the smallest word parts which have meaning, such as prefixes and suffixes. A third level students must master is semantics, or knowledge of words and their meanings. Syntax, or understanding how the order of words in a sentence affects meaning, is a fourth level. Discourse, a fifth level of language, goes beyond the sentence level, to include an understanding and use of passages and paragraphs. As children develop, they must learn to monitor and reflect on their understanding and use of language.

Children may have language differences at one or more of these levels. Some children can't break down words into sounds and syllables and have a difficult time reading. Some have difficulty understanding directions. Others can't express themselves well and sometimes give up, or repeatedly use easy words they know well. Such children may not enjoy talking because they can't find the right words to say. Some research suggests that preschoolers who are slow in developing language

skills may have learning difficulties as they grow older. However, advising parents to seek help for a child who is slightly delayed in developing language skills is not necessarily appropriate since the normal range in language development can vary a great deal. Many experts note where they might be having difficulty.

In recent years, educators have challenged the customary belief that children should be taught language by absorbing it from reading literature and speaking. Many educators now assert that students may also need to be taught explicit strategies for cracking what may be referred to as "the language code." According to reading researcher Dr. Louisa Moats and others, teaching language is scientific. Too often parents and teachers think children learn language effortlessly, by absorbing the sounds and words in their world. For some students, it is that easy. But others need to be taught specific strategies that break language ability into smaller elements.

Dr. Moats is currently heading a longitudinal study in Washington D.C., to teach teachers such techniques as breaking down words for children into sounds and helping children understand word order in sentences. Young students are taught to recognize the sounds that letters make and to blend sounds together to form words. Rhyming is often used to help children recognize repeating sounds as well. Already, students appear to be grasping language better with curriculum that focuses on breaking down words.

Helping Children Understand and Communicate with Language

- · Adjust the pace when teaching a lesson and accentuate the most important points.
- · Preview, repeat and summarize important points.
- · Identify a classmate with whom the child can compare notes.
- Tell children specifically what they should be listening and reading for in an assignment. For example, say, "In this lesson, listen for these two main points. . . . "
- Break down material into manageable parts. For children who are writing a paper, suggest that they first get their thoughts down on paper. Later, they can review for grammar, spelling and punctuation.
- Help children create images in their mind to better understand concepts. For example, when teaching ratios, have them envision a pie with slices taken from it.

Many older children who suffer from language problems are sometimes years behind their peers in listening, speaking, reading, and writing. Along with several colleagues, language researcher Dr. Elisabeth Wiig discovered that many students simply didn't understand words they were expected to use in the classroom. There was a disconnect between what teachers thought students knew and what they actually did know. To help these students, teachers in Dr. Wiig's study began explaining words and concepts in terms that related to students' everyday and academic lives. Teachers also began questioning students to find out exactly where they were in their understanding and then helped them fill in the gaps.

As these and other studies have shown, parents and teachers can help students with language difficulties succeed through the use of a variety of home and school strategies. Children can improve their ability to solve complex language based tasks such as an oral report by using a series of steps rather than tackling the task all at once. Adults can give students checklists and written reminders of effective approaches. Often, parents and teachers can find ways to help children work around their difficulties and not become frustrated.

Dr. Levine points out that adults need to realize language difficulties can occur in specific settings. A child may use language effectively in school, but be unable to communicate well with friends or at home, or visa versa. Even the most subtle language difficulties can cause significant problems for students if they are misinterpreted or misunderstood. Most of all, Dr. Levine says, parents and teachers need to be attuned to a child's learning and spot any problem areas as soon as possible so the child can be helped.

Bibliography

Articles

Azar, Beth. "What's the Link Between Speed and Reading in Children with Dyslexia?" Monitor on Psychology 31, no. 3 (March 2000).

Bell, Laura. "Deciphering Dyslexia Researchers Gaining Insight into Cause of This Disability." The Dallas Morning News (February 1996).

Brown, Frank R. III, Elizabeth H. Aylward, and Barbara K. Keogh. "The Relationship Between Language and Learning Disabilities." Reprinted from Diagnosis and Management of Learning Disabilities, www.ldonline.org

Editorial. "On Guard, Mothers! The Chomskians Are After You." The San Diego Union-Tribune (May 1994).

Kantrowitz, Barbara. "Dyslexia and the New Science of Reading . . ." Newsweek (November 1999).

"Language Power Point Presentation." Schools Attuned, All Kinds of Minds institute.

Levine, Mel. "Education for Communicating." www.allkindsofminds.org

Mehren, Elizabeth. "Boston Study Finds Parents Give Gender Cues in Talk with Kids." Los Angeles Times (June 1992).

Moats, Louisa. "Training Teachers: The Key to Helping America Read." Speech to the U.S. House of Representatives. www.nrrf.org

Troi, Gary A., Froma P. Roth, and Steve Graham. "An Educator's Guide to Phonological Awareness: Assessment Measures and Intervention." Focus on Exceptional Children 31, no. 3 (November 1999): 1-12.

Wiig, Elisabeth JH, Evelyn Freedman, and Wayne A. Secord. "Developing Words and Concepts in the Classroom." Intervention in School and Clinic 27, no. 5 (May 1992).

Wilgoren, Debbi. "Raising Standards from Word One . . ." Washington Post (May 1998).

Web Sites

www.ldanatl.org "Fact Sheet, Spoken Language and Learning Disabilities."

www.ldonline.org "Speech & Language Milestone Chart."

Language

Resources

This list of resources offers more information on a range of issues regarding language and the school age child.

Web Sites

All Kinds of Minds

www.allkindsofminds.org Explores how language permeates the school experience. The Library section of the site includes case studies and articles such as "Educating for Communicating" and "Getting at Getting It: The Quest for Comprehension" by Dr. Mel Levine. The site's LearningBase offers further guidance and references for teachers and parents.

Communication Disorders Quarterly— The Council for Exceptional Children http://pegasus.cc.ucf.edu/~abrice/jccd.html Provides abstracts of studies relating to language development in children.

ERIC Clearinghouse on Reading, English, and Communication (ERIC/REC)

http://eric.indiana.edu Provides a vast collection of educational articles regarding language; search the database to locate articles for parents, teachers, counselors, and children.

International Dyslexia Association

http://interdys.org Gives information, access to research, and support to those working with children who have language difficulties.

LD Online www.ldonline.org

Links to extensive resources on the topic of language; also offers teaching and parenting tips on accommodations and interventions for children with speech and language issues. See LD In Depth for article entitled, "Late Blooming or Language Problem?"

Learning Disabilities Association of America www.ldanatl.org

Lists resources and books that address language and language-related difficulties. An online language fact sheet outlines the relationship among language, other neurodevelopmental functions, and learning.

Schwab Learning

www.schwablearning.org Offers families information for identifying and managing differences in learning and resources for connecting with others; provides information in both Spanish and English.

Articles and Pamphlets

Brown, Frank, Elizabeth Aylward, and Barbara Keogh. The Relationship Between Language and Learning Disabilities. Provides parents with information concerning the early identification of language difficulties in children; available online at: www.ldonline. org/ld_indepth/speechlanguage/speech_ldrelationship.html

International Dyslexia Association. **All Language and the Creation of Literacy.**Addresses two opposing sides to teaching literacy in a selection of papers presented at Whole Language and Phonics and Literacy and Language symposia; order online at: www.in terdys.org/book stor2.htm#ods_publ

Culturally & Linguistically Diverse Students and LD. Offers suggestions to parents and educators dealing with the assessment of children who speak two or more languages. The full text is online at: www.schwablearning.org.

Mitchell, Angela. **Schoolhouse Block: Handling Learning Disabilities.** *Chicago Parent, 2* (1999). Describes language difficulties and gives information to parents on how to advocate for their child. The full text is available online at: http://family.go.com/
Features/famly_ 1999_02/chic/chic29learning

Schupack, Helaine, and Barbara Wilson.

Reading, Writing and Spelling: The Multisensory Structured Language

Approach. Provides teachers with information on ways to instruct children with language differences in reading, writing, and spelling. The booklet can be ordered online at: http://www.interdys.org/bookstor.htm

Torgesen, Joseph. **Phonological Awareness: A Critical Factor in Dyslexia.** Explains why phonological understanding is crucial for reading. The booklet can be ordered online at: www.interdys.org/bookstor.htm

Books

Benita, A., et al. Road to the Code: A

Phonological Awareness Program for Young
Children. Baltimore, MD: Paul H. Brookes
Publishing Co., 2000. Provides a program for
early elementary students needing additional
help with phonemic awareness and letter/sound
correspondence; includes reproducible materials
and scripted lessons for teachers' use in small
group and individual work.

Birsh, Judith, ed. **Multisensory Teaching of Basic Language Skills.** Baltimore, MD: Paul H. Brookes Publishing Co., 1999. Covers the importance of oral language, phonemic awareness and alphabet knowledge, helping teachers to address the needs of dyslexic students.

Catts, H., and Alan Kamhi. **Language and Reading Disabilities.** Boston, MA: Allyn & Bacon, 1998. Addresses assessment and treatment of difficulties resulting from delays in language acquisition including verbal communication, reading, and writing.

Gleason, Jean Berko. **The Development of Language.** Boston, MA: Allyn & Bacon, 2000. Looks at language from a developmental perspective and explores phonology, morphology, syntax, semantics, and pragmatics; provides current research findings and discusses individual differences in language development.

Levine, Melvin D. **A Mind at a Time.** New York: Simon and Schuster, 2001. Familiarizes the general public with the author's eight constructs (called "capabilities" in the book); provides real-life stories of children, adolescents, and adults who have struggled with their neurodevelopmental profiles. The book also describes systematic approaches to dealing with difference in learning, and it concludes with chapters on what ideal homes and schools should be doing to foster the optimal development of all kinds of minds.

Levine, Melvin D. **Developmental Variations** and Learning Disorders, 2d ed. Cambridge, MA: Educators Publishing Service, 1998. Offers comprehensive information about developmental variations in children that can lead to learning difficulties, and explores research from different disciplines; useful for clinicians, educators, and parents.

Levine, Melvin D. **Educational Care**, **2d ed.** Cambridge, MA: Educators Publishing Service, 2002. Covers key themes in academic performance. The book is intended to be a practical guide to the understanding and collaborative management of differences in learning. For each topic, there are recommendations regarding what needs to be done at home and also in school to help a struggling child or adolescent succeed.

Levine, Melvin D. **The Myth of Laziness**. New York: Simon and Schuster, 2002. Focusing mainly on students between the ages of 11 and 15, this book deals with the understanding of "seemingly lazy kids." Author describes the many possible mechanisms underlying output failure or low productivity in school; covers, among other possibilities, the roles of weak attention controls, memory shortcomings, language gaps, and organizational problems. Real case material is presented and there are abundant suggestions for managing output problems.

McCormick, L., D. Loeb, and Richard Schiefelbusch. Supporting Children with Communication Difficulties in Inclusive Settings: School-Based Language Intervention. Boston, MA: Allyn & Bacon, 1997. Provides a model to improve and support communicative competence in diverse classrooms; written especially for speech-language therapists, though it does not assume a background in this area.

Moats, Louisa C. **Speech to Print: Language Essentials for Teachers**. Baltimore, MD: Paul H. Brookes Publishing Co., 2000. Ties the theory of language development to the classroom; exercises enable reader to recognize problems that children confront when learning to read and write.

Tibbits, Donald F., ed. **Language Intervention: Beyond the Primary Grades**.
Austin, TX: Pro-Ed, 1995. The chapter entitled, "Scaffolding in the Secondary School: A Tool or Curriculum-based Language Intervention" by N.W. Nelson, explores effective intervention techniques for secondary school adolescents

who have language-related difficulties.

Vail, Priscilla. A Language Yardstick:
Understanding and Assessment. Rosemont,
NJ: Modern Learning Press, 1998. Identifies key
elements of a child's receptive and expressive
language and the link between language and
thinking from preschool through fourth grade.
Activities are suggested for parents to help
children strengthen language abilities.

Vail, Priscilla. "Words Fail Me": How Language Works & What Happens When It Doesn't. Rosemont, NJ: Modern Learning Press, 1996. Surveys how children develop language and explains its ties to reading, writing, listening and speaking; also explores how these skills are learned and what happens when the process breaks down at various stages.

Audiotape

All Kinds of Minds. When Language
Languishes: A Common Source of
Childhood Failure (audio). Part of the
Reaching Minds audiotape series. In this tape,
Dr. Mel Levine and Dr. Katharine Butler discuss
language as both a tool for learning and an
outcome of learning. Ordering information is
available online at: www.allkindsofminds.org

Resources for Children and Adolescents

Kids Only Info—International Dyslexia Association http://interdys.org/kidsonly.stm
Provides basic facts, definitions, homework
tips and suggested reading lists in a child
friendly manner. The site has separate
sections for children and young adolescents
ages 6–8, 9–11, and 12–15.

Betancourt, Jeanne. **My Name Is Brain/Brian.** New York: Scholastic, Inc., 1993. With the help of his sixth grade teacher, Brian is diagnosed with a language problem and receives the support that helps him to manage his learning differences.

Levine, Melvin D. **All Kinds of Minds**. Cambridge, MA: Educators Publishing Service, 1993. Written for children ages 7–11, this book clearly outlines the neurological reasons for learning differences including language and their effect on life at home and at school.

Levine, Melvin D. **Keeping A Head in School**. Cambridge, MA: Educators Publishing Service, 1990. Helps children ages 11 and older understand and appreciate their own distinct learning profiles; offers different ways to bypass or strengthen weaker functions.

Levine, Melvin D. **The Language Parts Catalog**. Cambridge, MA: Educators Publishing Service, 1999. Helps adolescents 12 years and older understand the various parts of language and the roles language plays in school and in social life. The book is especially useful in trying to demystify students with language dysfunctions. Readers who belive they have weak language functions may "send away" for replacement parts. Students also are given specific remedial techniques to try while waiting for their "parts" to arrive in the mail.

Levine, Melvin D., Carl Swartz, and Melissa Wakely. **The Mind That's Mine**. Cambridge, MA: Educator Publishing Service, 1997. Helps young children discover what goes on inside their brains when they are thinking and learning; available at: www.allkindsofminds.org

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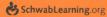
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