



**Kaufman Psychological Services**

Training, Consultation, Evaluation

***SUPPLEMENTAL  
MATERIALS***

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MADSEC Reading  
Training**

## TEACHING READING: Strategies and Suggestions



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### *Prevention:*

- All children, in their toddler and preschool years, should be exposed to activities that build phonological awareness. **Rhyming games** are essential at this age, as are activities that help very young children learn to not only recognize upper and lower case letters, but also begin to understand that letters ‘say’ sounds (sound-symbol association).
- All children, starting in the first year of life, should be **read to frequently**, with efforts being made to engender not only an enjoyment of reading, but also key pre-reading ideas such as **concepts of print** (i.e., that books are comprised of pictures and words that tell the story and the story progresses with each page).
- Parents can help build comprehension strategies in their young children by asking, as they read to them, questions that target **inference** (“Why do you think the cat said that?”) and **prediction** (“What do you think will happen next?”).
- Preschool children with speech/language delays are at substantially greater risk of experiencing reading skill acquisition delays than the ‘normal’ population. It is essential, therefore, that parents and preschool (and kindergarten) educators endeavor to provide these children with *additional phonological awareness training!* These children should also be provided with enhanced (perhaps individualized) exposure to activities that help establish the alphabetic principle.
- All children should be taught to decode in early elementary school via the implementation of systematic, scientifically supported instructional approaches that operate from a synthetic phonics model (to reduce the number of children who struggle with the acquisition of word attack skills). These techniques should be richly supplemented with exposure to literature-based reading activities that instill the joy of reading.

### *Decoding:*

- All children must grasp in their preschool and early elementary school years the ‘alphabetic principle’ (that letters are associated with particular phoneme sounds) and the notion that words are comprised of specific combinations of phonemes/morphemes.
- An increasing body of research has indicated that the most effective way of helping most children to decode is to use instructional strategies that systematically/sequentially teach synthetic phonics (that teach the notion that words can be read by linking the letters to their corresponding phoneme sounds and then putting the sounds together).
- Techniques based on the Orton-Gillingham multi-sensory, systematic model of synthetic phonics training (i.e., Wilson ‘Foundations’) have strong research support and should serve as the basis of most children’s decoding training activities.
- Atypical words (words such as “yacht,” which defy traditional phonemic rules) and high frequency/irregular sight words should be taught through systematic, multiple exposure activities that aid children in encoding them in long-term memory. Placement of these words in “word wall” and “word bank” contexts can be helpful, particularly if teachers refer back to them often across a range of instructional activities.
- Dyslexic children require VERY INTENSIVE, SYSTEMATIC, SEQUENTIAL, and CUMULATIVE remedial activities that help their brains establish the ‘neuro-pathways’ needed for fluid decoding. Highly structured programs based on the Orton-Gillingham multi-sensory model (i.e., Wilson Reading System) tend to be most effective for children whose struggles relate primarily to phonological processing deficits. Children whose reading delays stem more from orthographic memory deficits tend to benefit more from systematic (and frequent!) repeated reading practice (i.e., Great Leaps) and lots of sight word drills.
- It is essential that the systematic, multi-sensory, synthetic phonics programs used with dyslexic children be continued on a consistent basis across a number of years. *Alternating approaches from year to year based on the whims/interests of particular special educators tends to inhibit students’ progress!!*
- Involve several pathways (Mel Levine). Parents and teachers should read aloud together with children so children can see and hear the words being read. Using books on tape that allow children to read along as they listen can have similar benefits. Singing songs that use words with sounds that children are working on can also be helpful.

## *Fluency:*

- *Daily guided oral reading is critical.* Research clearly indicates that the best way of helping all children develop into fluid readers is to provide them with as much individualized guided oral reading support as possible.
- What is guided oral reading? Quite simply, it involves children reading to adults or older children, who (consistently, gently, supportively) correct errors.
- Among the important benefits of guided daily oral reading is that it helps ensure that the child accurately encodes in his/her long-term memory accurate ‘word-form’ representations. In the absence of this support, children can encode words incorrectly in long-term memory, resulting in these words having to be ‘relearned’ (resulting in greater reading inaccuracy and frustration).
- Repeated reading programs such as Great Leaps have a strong research base and are among the most helpful ways of providing structure guided oral reading practice for struggling readers (also quite helpful with gauging progress).
- Fluency-oriented reading instruction (FORI) is a research-validated way of providing significant levels of guided oral reading feedback to groups of children (see attached handout).
- SSR (Sustained Silent Reading) and DEAR (‘Drop Everything and Read’) approaches have precious little empirical support as techniques to build fluency. While they do provide children with important daily reading practice (assuming kids are actually reading during these periods . . .), SSR and DEAR provide little to no guided feedback.
- Round-robin small group oral reading approaches also tend to be of limited utility, as they tend to provide children with only very small amounts of guided oral reading feedback. It is best to supplement these small group approaches with more individualized guided oral reading. Many schools are now using classroom volunteers (parents and foster grandparents) to provide as many children as possible in a given day periods of individualized guided oral reading sessions.
- Encourage reading with expression. Attempts to read in an animated manner (even to oneself) increase attention to and engagement with narrative text (improving fluency). More expressive readers also tend to be more motivated readers and experience higher levels of comprehension than students who read in a more monotone/listless manner.
- Involve several pathways (Mel Levine). Parents and teachers should read aloud together with children so children can see and hear the words being read. Using books on tape that allow children to read along as they listen can have similar benefits. Singing songs that use words with sounds that children are working on can also be helpful.

### *Comprehension:*

- Provide kids with a specific purpose for reading assignments! Among the things that separate strong/experienced readers from less able readers is that the former tend to be skilled at establishing clear ‘mission’s for different reading activities (e.g., “I’m going to read this biology chapter to learn the key vocabulary on cell structure and the important parts of the cell”). Research on comprehension has consistently demonstrated that students, across all skill levels, comprehend best when they are given a clear ‘mission’ for reading tasks. Telling students the objectives of their reading (i.e., finding out whether their predictions for the next chapter in a fiction book were true, learning the specific motivations of two key characters in the second act of a play, or understanding how the different parts of a leaf allow for photosynthesis) may create for an overly narrow focus during reading, but it also increases the likelihood of a student’s accomplishing the key learning objectives of a reading activity. Use of these ‘advanced organizers’ also leads to improved attention, and helps the brain better integrate/synthesize the information into long-term memory.
- Reciprocal teaching (Palinscar & Brown) has a strong research base and works quite well in building the comprehension skills across the grade span. Basically, RT is an interactive method in which teachers and students take turns leading discussions regarding sections of text using the meta-cognitive strategies of questioning, clarification, summarization, and prediction. Ash (2002) has improved upon the method by adding a fourth strategy (evaluation), which encourages students to critically evaluate what they’ve read from a variety of perspectives.
- Dyslexic children and those with attention/executive functioning difficulties (regardless of age/grade) often benefit substantially from having key elements in text highlighted in advance by parents and teachers (helps ensure adequate saliency determination – picking out and remembering what’s really important).
- Teach children, particularly those with attention and memory difficulties, to summarize/paraphrase what they read. Such approaches substantially reduce working memory demands and also tend to greatly improve encoding of key information into long-term memory. This can often be accomplished by modeling for the class questions such as, “What do I think are the most important things from the passage I just read?”
- Connect reading to what children already know (Mel Levine). Techniques such as having children discuss what they already know about a topic before reading and/or making a quick list of what they would like to learn about the topic before reading can greatly improve cognitive activation (linking new information to what’s already known) and depth/detail of processing.

- Encourage visualization. Many children are visual learners, but struggle with forming mental images/representations while they read. Teachers can improve this aspect of a student's comprehension by pausing during class 'read aloud' periods and guided oral reading sessions and asking children to try and picture in their minds the events depicted on the page. Nancy Bell's 'Visualizing/Verbalizing' approach tends to be a helpful method of improving the comprehension of students with language and executive functioning deficits.
- Preview difficult/new vocabulary before students begin to read. New and challenging words tend to quickly break down fluency and reading confidence (and can sometimes completely occupy students' working memory, leaving little room for anything else!). Previewing new or particularly challenging vocabulary before a reading session removes these obstacles to fluency and also provides an advanced organizer of sorts that will build (rather than impede) comprehension.
- Select a strategy (Mel Levine). Before children begin reading, have them write down the reading comprehension strategy they plan to use. They might choose guiding questions, highlighting, or underlining important details, writing comments in the margin, or summarizing each paragraph. *The important thing is to encourage children to try and read strategically each time.*
- Encourage children to become more skilled in the use of 'meta-memory' strategies, by having them ask themselves after they read, "How am I going to remember this?" Giving them strategies for better retention (i.e., summarization, categorization, acrostic phrases, etc.) tends to significantly improve both recall and comprehension.

## Suggested Readings

- Ellery, V. (2005). *Creating Strategic Readers: Techniques for Developing Competency in Phonemic Awareness, Phonics, Fluency, Vocabulary, and Comprehension*. Newark, DE: International Reading Association
- Feifer, S.G., & De Fina, P.A. (2000). *The Neuropsychology of Reading Disorders: Diagnosis and Intervention*. Middletown, MD: School Neuropsychology Press.
- Hale, J.M., & Fiorello, C.M. (2004). *School Neuropsychology: A Practitioner's Handbook etc.*
- Hutchins, C., & Zimmerman, S. (2003). *Seven Keys to Comprehension: How to Help Your Kids Read and Get It*. New York: Three Rivers Press.
- Kamil, M. et al. (2000). *Handbook of Reading Research, Volume III*. Mahway, NJ: Lawrence Erlbaum Associates.
- Levine, M. (2002). *A Mind at a Time*. New York: Simon and Shuster
- Levine, M. (2002). *Educational Care*. Cambridge: Educators Publishing Service
- McCardle, P., & Chhabra, V. (2004). *The Voice of Evidence in Reading Research*. Baltimore: Paul Brookes Publishing Co.
- National Reading Panel (2000). *Report of the National Reading Panel: Teaching Children to Read*. Washington, DC: National Institute of Child Health and Human Development
- Palincsar, A.S., & Brown, A.L. (1985). Reciprocal teaching: Activities to promote read(ing) with your mind. In T.L. Harris & E.J. Cooper (Eds.), *Reading, thinking and concept development: Strategies for the classroom*. New York: The College Board.
- Palincsar, A.S., & Klenk, L.J. (1991). Dialogues promoting reading comprehension. In B. Means, C. Chelemer, and M. S. Knapp (Eds.), *Teaching advanced skills to at-risk students*. San Francisco: Jossey-Bass.
- Shaywitz, S. (2003). *Overcoming Dyslexia: A New and Complete Science-Based Program for Reading Problems at Any Level*. New York. Alfred P. Knof.
- The Partnership for Reading (2001). *Put Reading First: The Research Building Blocks for Teaching Children to Read*. Washington, DC: US Department of Education
- Tovani, C. (2004). *Do I Really Have to Teach Reading? Content, Comprehension, Grades 6 – 12*. Portland, ME: Stenhouse Publishers
- Vaughn, S., & Linan-Thompson, S. (2004). *Research-Based Methods of Reading Instruction – Grades K – 3*. Alexandria, VA: Association for Supervision and Curriculum Development
- Wise, B., & Snyder, L. (2004) *Clinical Judgements in Identifying and Teaching Children with Language-Based Reading Difficulties*. Boulder, CO: University of Colorado Press

## ORAL READING ERROR ANALYSIS GUIDE

Although comprehensive neuropsychological batteries and standardized academic assessment instruments (i.e., the WJ-III Academic and the WIAT-II) are excellent resources in determining the nature and severity of reading struggles, examinations of a student's oral reading error patterns through the use of 'running record' approaches remains an essential part of the diagnostic/prescriptive process. Teachers are strongly encouraged to conduct running records not just to establish a student's oral reading accuracy and fluency, but also to help shed light on the type(s) of difficulty the child is experiencing (Is the dysfluency related to deficits in phonological processing, orthographic processing, executive functioning, or speeded naming?). Below is a list (adapted from J. Hale and C. Fiorello's, *School Neuropsychology: A Practitioner's Handbook*, pp. 186-187) of common oral reading error patterns with abbreviations teachers can use in taking notes during running record examinations:

- Pause/repetition (PR) – Child delays or repeats words, suggesting limited automaticity
- Omission (OM) – Child leaves out or skips words
- Insertion/addition (IA) – Child adds letters or words
- Semantic substitution (SS) or paraphasia – Child substitutes whole words
- Phonemic substitution (PS) – Child substitutes letters/sounds within words
- Configuration substitution (CS) – Child uses initial letters or whole-word configuration to provide meaningful substitution (which can violate context of sentence)
- Sequencing/reversal (SR) – Child reverses word order or parts of words
- Syntax error (SE) – Child ignores or adds punctuation by pausing or changing inflection
- Metacognitive (executive) correction (MC) – Child automatically corrects word, either immediately or after reading additional text

In addition to these error patterns noted by Hale and Fiorello, Dr. Kaufman suggests also looking for the following:

- Phonemic deletion (PD) – Child leaves out parts of words (e.g., does she, with some frequency, skip the initial, medial, or ending sound?)
- Line skipping (LS) – Child skips whole lines or portions of lines in connected text (without noticing that this has occurred)

## NATURE/TYPES OF SPELLING ERRORS RESULTING FROM THE DIFFERENT LANGUAGE-BASED DYSGRAPHIAS

### Dysphonetic Spelling Errors

Target Word	Misspelling	Analysis
point	Pot	phoneme substitution
train	chan	phoneme substitution
old	od	phoneme deletion
climbing	cling	phoneme deletion
job	joib	vowel substitution
video	veio	consonant omission
kitchen	tihn	consonant omission

### Surface Dysgraphia Spelling Errors

Target Word	Misspelling
knock	nok
build	bild
mighty	mite
juice	juse
plate	plat
onion	unnyun
said	sed
yacht	yot
laugh	laf

### Mixed Dysgraphia Spelling Errors

Target Word	Misspelling	Analysis
advantage	advangate	letter order reversal
cobweb	coweb	consonant omission
illusion	Ishn	syllable omission
pocket	poct	syllable omission
work	wrok	letter order reversal
kitchen	kinchen	insertion error
worried	weirie	consonant deletion

\* Adapted from Feifer, S.G., & DeFina, P.A. (2002). *The Neuropsychology of Written Language Disorders*

## CASE STUDY MATERIALS

### *Case Study One:*

Name: Patrick

Age: 7

Grade: 2

Profile: Patrick is a bright youngster with a history of significant articulation difficulties, but who otherwise possesses strong verbal skills (large vocabulary and strong verbal elaboration skills). His K - 2 teachers have all described him as intelligent, intellectually curious, highly creative/imaginative, and as possessing his "own interesting ways of looking at and solving problems." These teachers (and Patrick's parents) have also noted his marked difficulties with the acquisition of decoding skills. Although he seems to have a very strong memory for vocabulary and facts ("He's like a sponge - he remembers everything"), he can't seem to recall from one day to the next letter/sound relationships (including morpheme/sound relationships). He also tends to struggle with understanding letter order within words and the implications of word order on it's sound (for example, he'll often latch onto a letter in the middle or towards the end of a word and make that sound for the start of a word). Although a nice kid with strong social skills who appears to enjoy the social aspects of the school day, Patrick has begun to tell his parents how much he hates school. He still enjoys being read to at home by his parents, but strongly resists their attempts to get him to read to them ("I'm too tired - I just want to go straight to bed"). Reading Recovery services were attempted in the first grade but did not yield significant improvements in Patrick's decoding skills. Special education testing completed within recent weeks confirmed Patrick's intelligence (Full Scale IQ within the above average range), but also reflected relative weakness in the areas of spatial reasoning/comprehension. Standardized academic testing indicated that while Patrick's math and listening comprehension skills are quite well developed (high average to superior range), his word reading, word attack, reading comprehension, spelling, and handwriting skills are well below his expected ability level. A PET is pending. His parents are greatly concerned about their bright, creative son's seeming inability to learn to read and, regardless of the outcome of the PET, are strongly considering obtaining outside reading tutoring services for Patrick.

## Case Study Review and Intervention Plan

Academic Strengths (What's working well . . .)

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Academic Weaknesses (What's not working well . . .)

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What are your functional hypotheses about this student's profile?

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Interventions Strategies (including recommended accommodations and modifications)

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## *Case Study 2*

Name: Jessica

Age: 10

Grade: 5

Profile: Jessica presents as a sweet, but shy youngster who has a history of somewhat erratic school attendance. Born to a 17 year old mother who dropped out of high school (biological father was never clearly identified), she was largely neglected in her first two years of life before being removed from her mother's care by the Department of Human Services (DHS) at the age of three after being found 'wandering the streets on her own' on several occasions. She was placed in an array of foster care situations through the age of six before being placed in her current foster home (in which she has remained and done well for the last four years - her foster parents seem to care deeply for her, but have their own three children as well as one other foster care child - "We're overwhelmed - a lot"). Jessica's teachers have always characterized her as having a "good mind" and seemingly strong "thinking skills." Despite these cognitive assets, however, her reading, math, and written language skills have continued to fall almost two years below grade level. She comprehends well what she hears in class, but tends to read in a slow, labored manner without much inflection. She says reading "bores" her and rarely ever reads outside of school. Her responses to reading comprehension prompts tend to be short and vague (nonspecific). She also tends to start assignments incorrectly with some frequency due to her tendency to misread written instructions. Special education testing conducted towards the end of her fourth grade year reflected average intellectual ability (FSIQ = 105) and the absence of any significant cognitive deficits. Standardized academic testing conducted as part of the evaluation indicated that her word reading, word attack, and listening comprehension skills were all solidly average, but her passage reading speed was slow, her accuracy quite variable, and her comprehension about a year below grade level. Spelling skills and math were generally okay (lower end of the average range). As a function of these evaluation results, the PET determined that Jessica was ineligible for the LD classification or special education services (despite her generally slow, dysfluent reading in the classroom). Jessica was not provided with Reading Recovery Services, but did receive Title I reading for in grades 1 - 4.

## Case Study Review and Intervention Plan

Academic Strengths (What's working well . . .)

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Academic Weaknesses (What's not working well . . .)

--

What are your functional hypotheses about this student's profile?

--

Interventions Strategies (including recommended accommodations and modifications)

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