

**Strands of Language:
Language and Literacy
Assessment and Intervention
in School-age Children**

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**Oral and Written
Language: A Puzzle**

- Role of SLP
- Connection of oral and written language

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Roles and Responsibilities

- The Guidelines for Roles and Responsibilities of Speech-Language Pathologists With Respect to Reading and Writing in Children and Adolescents, state: the roles and responsibilities for SLPs with regard to reading and writing in children and adolescents include, but are not limited to:
 - **Prevention.**
 - **Identification.**
 - **Assessment.**
 - **Intervention.**
 - **Other roles.** Other roles include providing assistance to general education teachers, families, and students; advocating for effective literacy practices; and advancing the knowledge base.

Roles and Responsibilities of SLP in Oral and Written language
ASHA, 2001

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Position Statement ASHA

SLPs play a critical and direct role in the **development of literacy for children and adolescents** with communication disorders, including those with severe or multiple disabilities

SLPs are often the first professionals to identify the root cause of reading and writing problems through a child's difficulty with oral language.



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Oral and Written Language

(Shaywitz & Shaywitz, 2004)

"Reading reflects language, and reading disability reflects a deficit within the language system"

Reading Impairment is the most common of the learning disabilities affecting 80% of all individuals identified as learning disabled

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Oral and Written Language.....

- 1) Spoken language provides foundational skills for foundation reading and writing
- 2) There is a reciprocal relationship between spoken and written language—bi-directional
- 3) Children with language impairments are frequently have reading/writing problems
- 4) Spoken language intervention facilitates progress in written language (reading, writing, spelling)

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Components of Language

Forms of Language

Phonology: Rules and patterns by which the phonemes are combined into words and phrases

Morphology: Smallest meaningful units of language that modify word structures in order to change the meaning of the word (boy, boys, teach, teacher)

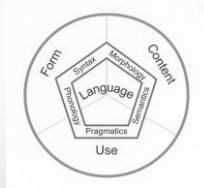
Syntax: A rule system that governs how words are combined into larger meaningful units of phrases, clauses, and sentences

Content

Semantics: Encompasses the ability to distinguish word meanings, including multiple meanings and subtle nuances, and relationships between words

Use of Language

Pragmatics: The ability to use language in specific contexts and for the specific purposes



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Literacy defined

- the ability to read, write, and spell
- the ability to use language proficiently

• Collins English Dictionary—Complete and Unabridged, 12th Edition 2014, © HarperCollins Publishers 2014

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Subtypes Based on Comprehension Versus Word Recognition

- According to the theory of Hoover and Gough called *Simple View of Reading*,
 - Reading comprehension is the result of
 - 1) listening/language comprehension and
 - 2) word recognition skills (decoding)
 - 3) or both

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Reading Disorder/Dyslexia

Definition of Dyslexia

"Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction." (Lyon & Shaywitz, 2003)

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Narrow Definition: Dyslexia

National Institute of Child Health and Development (Lyon, Shaywitz, & Shaywitz, 2003)

- Secondary consequences: may include—
 - problems in **reading comprehension** (e.g., all areas of language—morphosyntax, semantics, pragmatics) and
 - **reduced reading experience that can impede growth of vocabulary and other areas of language and background knowledge.**

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Dyslexia defined as

- Language-based
- Slow and/or inaccurate reading
- Poor spelling
- Core deficit is in phonological processing (e.g., PA, PM, RAN)
- Difficulties exist despite adequate cognitive abilities and appropriate instruction
- Can impede vocabulary growth due to reduced reading
- Do not outgrow with maturity

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Broader Definition: Reading Disability

Research:

- Used for children who typically have delays in oral language acquisition that affect their ability to comprehend language in any form whether oral or written.
- May learn to decode in early grades and are able to manage content when simple and the demands on comprehension are limited.
- However, their weak oral language skills are inadequate to support the more complex content they need to process in grade-level reading material

• Can also have a Combination: RD

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Early Red Flags: Alphabet Knowledge

Preschool:

- Difficulty learning and remembering the names of letters in the alphabet
- Difficulty recognizing letters in his/her own name
- Difficulty with word retrieval
- Difficulty learning numbers, days of the week, colors, and shapes

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Identifying Signs of Dyslexia:

Second Grade-Middle School

- Very slow in acquiring reading skills
- Slow and awkward oral reading
- Trouble reading unfamiliar words
- Avoids reading out loud
- Word retrieval
- Mispronunciation of long or complicated words
- Trouble remembering dates, names, telephone numbers, random lists
- Trouble finishing tests on time
- Low self-esteem

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Prevalence

- Moats (2010)
 - 20% of school-age children—very poor readers
 - An additional 20% --do not read fluently and are unable to enjoy independent reading—for a total of 40%

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Risk Status of Children with Speech-Language Impairments

Approximately 10-15% of children in kindergarten are identified with speech/language impairment

- Over 50% of children with Language Impairments will have academic difficulties
- "One of the most compelling findings from recent reading research is that children who get off to a poor start in reading rarely catch up".

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What do we know from Research:

Phonemic awareness plays a significant role in the development of reading and spelling abilities

Morphological awareness is related to children's spelling, word-level reading, and reading comprehension abilities

Semantics: Oral vocabulary skills (receptive or expressive vocabulary ability) are related to reading and spelling

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What do we know from Research:

Syntax: A definite association between syntactic abilities and literacy outcomes are established in research

Pragmatics: Narrative abilities in kindergarten predict:

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Assessment

Where is the breakdown?

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Oral and Written Language Assessment: Solving the Puzzle

- Assess the five areas of Language
- Assess Oral and written language

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Key Areas to assess: Assessment

- 1. Underlying phonological processing skills
- 2. Underlying spoken language skills
- 3. Narrative
- 4. Reading and writing skills
- 5. Spelling skills
- 6. Cultural context

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Language and Literacy Battery

- CELF-5 or TOAL-3
- CELF-5 Metalinguistic
- PPVT-5 and EVT-3
- TWS-5
- TOWRE
- GORT-5
- CTOPP-2
- OLS
- TNL-2
- TILLS – Test of Integrated Language Skills
- TWS-5
- OLS
- Narrative (oral/written)
- Parent/teacher information
- Case History
- Hearing/Vision



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Standardized Word-level reading and Rate/Accuracy/Fluency/Comprehension

- Woodcock Reading Mastery Rest-Revised
- Gray Oral Reading-5

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Spelling Assessment

Standardized

- Quantify spelling performance relative to peers
- Test of Written Spelling-5

Spelling Inventory and Prescriptive

- Apel's
- Words Their Way
- More prescriptive: Spelling Performance Evaluation for Language and Literacy 2 (SPELL-2)
 - Identify patterns
 - PA, OPA, SA, MA, MGR

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Narrative Assessment and Analysis

- Standardized Assessment: TNL-2**
- Analyze macrostructure: Story Elements
- Analyze microstructure: syntax, metalinguistic verbs, vocabulary

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Informal Assessment: Narrative

- Narrative retell/story generation Tools
- Story Grammar Content
- SGM Development Checklist
- T-Unit Developmental Norms
- Big A!** oral Narrative or story from **TNL-2**
- Analyze for narrative level, syntax, spelling, etc.

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Story Grammar Marker (Mindwing Concepts)

- Character
- Setting
- Initiating Event (Kickoff)
- Internal Response (Feeling)
- Plan
- Planned Attempts
- Direct Consequence (Tie-Up)
- Resolution (Ending *Feeling*)
- (Moreau, 2003)

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Narrative Retell- Oral

- Prior to reading the story tell client you are going to read him a book
- Following reading the story you will ask questions regarding the story and have him tell the story
- Read the story with expression
- Ask questions; record answers
- Client tell the story
- *Then write story

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Syntax/Semantic Analysis:

Analyze Narrative Sample base on syntax/semantics/etc.

- Syntax** - look at areas such as:
- Regular/irregular past tense
 - Regular/irregular plurals
 - Comparative/superlative
 - coordinating conjunctions
 - subordinating conjunctions
 - Etc.

Semantics: note difficulty with semantics (i.e., inappropriate use of vocabulary, non-specific language, etc.)

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Narrative Analysis:

Use the **Narrative Decision Tree** and the **SGM Developmental Checklist** to determine the **Narrative level** exhibited by the client

- Descriptive Sequence
- Action Sequence
- Reactive Sequence
- Abbreviated Episode
- Complete Episode
- Complex Episode

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Literacy-Based Intervention

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Literacy Based

- The narrative platform provides an **authentic learning** opportunity and encouraged **active participation** in the intervention
- Strategic learning must be developed **within a meaningful context**. Provides a shared learning context for mediated learning with a rich information base – information that can be examined from multiple perspectives

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Suggested Sequence of Literacy- Based Intervention

- **Activate Prior Knowledge** of narrative/expository components using a specific strategy (i.e. KWL, SQ3R)
- **Shared reading** with print referencing & expression
- **Questioning** of text using general comprehension and story grammar questions
- **Model the Text:** Complete Episode/Expository Text

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Sequence of Literacy- Based Intervention

- **Focused Skill Intervention** targeting individual goals using narrative/expository theme
- 1) Phonological Sensitivity/Sound Symbol (words from story)
 - 2) Semantics (vocabulary from story)
 - 3) Syntax/Morphology (sentence structures emphasized in story)
 - 4) Narrative/Expository
 - 5) Pragmatic activities (social thinking)

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PHONOLOGY

The sound system of the language

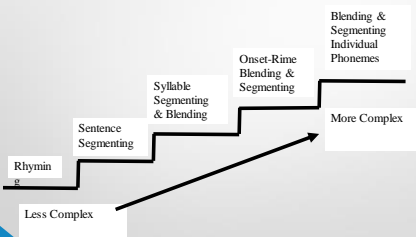
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Phonology

- **Phonological awareness**
 - **Levels of metalinguistic awareness**
 - Shallow—rhyming words in play, etc.
 - Deep—intentional manipulation of sounds in words, etc.
 - **Phonemic awareness**
 - Detecting word with different initial phoneme (odd one out)
 - Taking off final sound (elision or deletion)
 - Switching initial and final sounds (transposition)
 - Segmenting the sounds in a word
 - Blending the sounds in a word
 - **Phonics**
 - Graphemes
 - Alphabetic principle (learned first) → orthographic principle (learned later)

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Phonological Awareness Continuum



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Keys to Intervention

- **Teach explicitly** (model, guided practice, and feedback)
- **Teach systematically** (in a hierarchy of simple to difficult).
- **Model extensively**
- **Bombard students** with examples of target units
- Use a 1 second pause between phoneme units
- **Provide immediate corrective feedback**
- Use **repeated instruction on same target skill**: redundancy builds and solidifies skills
- **FM system** (Chermak, 2013)

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Phonological Sensitivity Intervention Tasks: Word level

Clapping Game: clap out the names of friends or **words in a sentence**

Clap out Nursery Rhymes

Walk the Word Trail

Listening to a book read (you or child pointing to the words)

Cloze procedure—after reading the story 2-3 times have child provide a word to the story

Identify number of words in a sentence read

Scrambled sentences

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Rhyming

During Fluent Reading

- How do words rhyme?
 - Words rhyme(ending sounds are the same)
- Emphasize the rhyming words
- Bring attention to the rhyming words

Tasks

- Cloze procedure
- Rhyme generation
- Rhyme recognition
- Which word does not rhyme?

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PSI--Syllable Level Interventions Explicit

- ⌘ Syllable Awareness: Important in later spelling and reading
 - ⌘ Syllable tapping with varying speed and support
- ⌘ Heads, Shoulders, Knees and Toes
- ⌘ Parts of words: Talk about that words can have two parts or more

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Intervention: Phoneme

- Blending phonemes to form words.

- Phoneme Segmentation:

[Advanced Phoneme task](#)

- Have the student say the word after you then student segments



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Sound Symbol Correspondence

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Sound Symbol Strategies

- Word/Syllable
- | Closed | Open | V-C-E |
|----------|--------------|-------|
| pen | go | take |
| Boat pen | go bike take | |

- Tap it Out  – Sound it Out  – Check the Order 



- Sound Strings: The client identifies the number of sounds then writes a letter under each bead to form the word.

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SEMANTICS

The meaning of language

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**Semantics –
What does the research say?**

- **MULTIPLE exposures** to a specific vocabulary words have a greater effect on vocabulary learning
- Struggling learners with language and reading deficits need as many as **55 trials** to acquire novel words compared to 7-11 trials for typical learners
- **Maximize the number of responses** in a limited amount of time to get vocabulary growth

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**What does it mean to have a word
in your vocabulary?**

- Lexicon/Lexical Entry
- Word meaning
- Pronunciation of the word
- Synonyms
- Multiple meanings of words
- Grammatical classification of the word
- Derivation of the word
- Sentence frames the word can appear in
- Word spelling

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Becks Method: Intervention Sequence for Tier 2 Words

1. Read the story
2. Contextualize the word within the story (go back to the book)
3. Have child say the word (write the word and have client say the word)
4. Provide a child-friendly explanation of the word
5. Give examples/nonexamples in a different context
6. Engage children in interacting with words
7. Have students repeat word again – and again!
8. Review and use new

Dr. Anita Archer: [wordshttps://www.youtube.com/watch?v=fr7yRYegjb8](https://www.youtube.com/watch?v=fr7yRYegjb8)

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Byrnes Strategy

- Cover all areas with sticky notes except target word and picture.
- Ask client to guess what word would mean based on picture
- Uncover green box and read definition. Ask questions based on word.
- Uncover purple box. Read sentences to client and have them circle the one that is used correctly.

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Byrnes Strategy



(cont.)

- Uncover pink circle. Ask client to choose synonyms/antonyms from 4 choices
- Uncover orange circle. Client says a sentence using the target word and clinician writes the sentence produced in this box. Scaffold as necessary.

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Treatment: Byrnes Strategy
Step 6. Interaction with the word

Choose Tier 2 words – useful words, but not entirely common

Red box: Target word

Blue box: Insert picture

Green box: Friendly definition

Purple box: 2 sentences using the word, correct/ incorrect

Pink circle: choose 2 synonyms and 2 antonyms at level of the target word or slightly below; put as multiple choice options

Orange box: leave blank; client to say or write own sentence

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Semantic Continuum

1. Select a pair of polar opposite words.
2. Generate at least five synonyms for each of the opposite words. Make cards for each word.
3. Make a bridge from one opposite word to the other. Continuums can be done horizontal or vertical, in a ladder-like fashion.
4. Have clients place the words and discuss their rationale for placing certain words in certain locations. Encourage a conversation about the subtle differences among the words.

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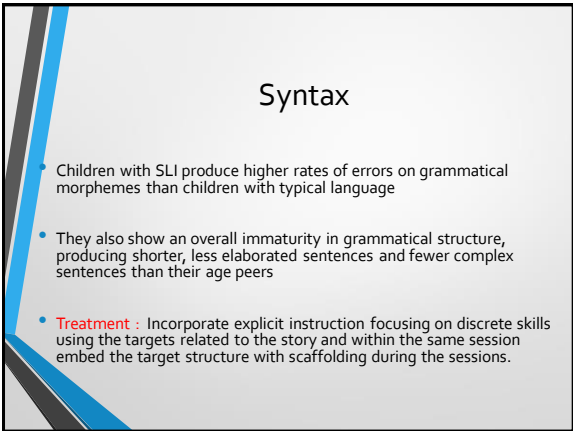
Word Sorts

- Put vocabulary terms on small cards or post-it notes.
- *Closed sort:* Have students sort words into predetermined categories (for younger children and complex concepts).
- *Open sorts:* Have students sort words into categories of their own making and label them. Encourage groups to find multiple ways of classifying the words to help refine and extend their understanding of the concepts represented by the words.
 - Client is more likely to remember word if they have a place for them (category)

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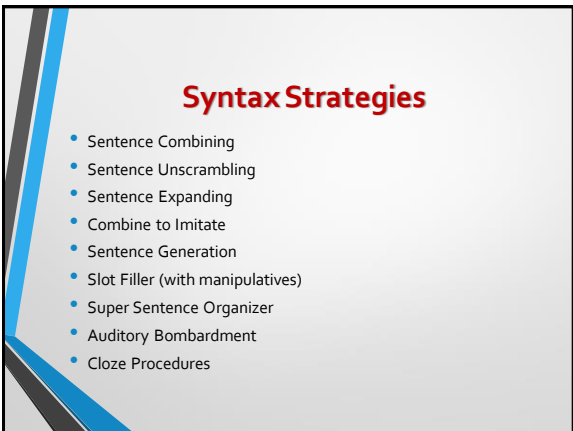


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- Children with SLI produce higher rates of errors on grammatical morphemes than children with typical language
- They also show an overall immaturity in grammatical structure, producing shorter, less elaborated sentences and fewer complex sentences than their age peers
- **Treatment** : Incorporate explicit instruction focusing on discrete skills using the targets related to the story and within the same session embed the target structure with scaffolding during the sessions.



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- Sentence Combining
- Sentence Unscrambling
- Sentence Expanding
- Combine to Imitate
- Sentence Generation
- Slot Filler (with manipulatives)
- Super Sentence Organizer
- Auditory Bombardment
- Cloze Procedures

Training Procedure for Teaching Syntactic Rules

Example target: "She is verb-ing." Slot-Filler Technique

1. Place blocks on table (each representing words).
2. Point to word/picture/blocks as you say the sentence.
"She is climbing."
3. Ask client, "What is she doing?" or "What's happening?"
Have child touch each block as he fills in each word of the sentence slots represented by the blocks.

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Training Procedure for Teaching Syntactic Rules
Slot-Filler Technique

4. Then ask "What is she doing?"
(Show picture.)
She is climbing.
5. *Generalization: Repeat with different target pictures.*

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Noun Phrase Elaboration Therapy: Sequence of Steps
Killgallon and Killgallon

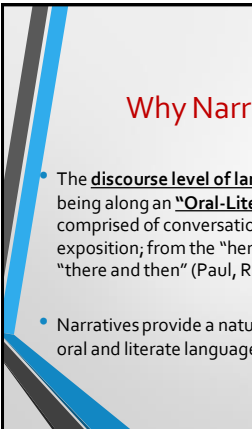
1. **Define:** Instruct target form
2. **Identify:** Find and underline target forms
3. **Combine:** Combine sentences
4. **Unscramble:** Unscramble sentences from text, underlining the target form in each
5. **Expand:** Given partial sentences and told to complete them with targeted form.
6. **Generate/Write:** Write own sentence using targeted form.

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**Narrative Structure:
The Language Literacy Link**

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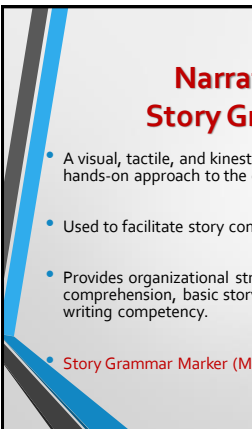


Why Narratives?

- The **discourse level of language** is described as being along an **"Oral-Literate Continuum"** comprised of conversation, narration, exposition; from the "here and now" to the "there and then" (Paul, R. & Norbury, C., 2012).
- Narratives provide a natural bridge between oral and literate language

© the "Here and Now" (Paul, R. & Norbury, C., 2012)

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**Narrative Therapy:
Story Grammar Marker**

- A visual, tactile, and kinesthetic tool to provide students with a hands-on approach to the discourse level of language.
- Used to facilitate story comprehension and expression.
- Provides organizational strategies to enhance reading comprehension, basic story organization, critical thinking, and writing competency.
- **Story Grammar Marker** (Mindwing Concepts, 2003)

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Narrative Strategies

- Storytelling (retell, parallel story, unscramble a story,
- Role playing
- Constructing stories from personal experiences
- Represent with pictures, story map, etc
- Quick-Writes/Stick-Writing
- Audience Participation (choral reading)
- Synchronized Techniques (flannel board, draw talk)
- Dramatization (puppetry, stage, props)
- Visual Mapping (character maps, setting maps, etc)
