

“Crossing the Bridge:” Developing Metalinguistic Awareness and Strategies



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Metalinguistic Awareness

Definitions

School-Age and Adolescent Development

Language Disorders and Metalinguistics



What is "Metalinguistic Awareness"?

Metalinguistic Awareness is demonstrated when a student exhibits the ability to talk about, analyze, and think about language independent of the concrete meaning of each word or expression.



Metalinguistic Awareness at Work

From Concrete to Abstract Interpretation

Think of the many meanings of the word **"BRIDGE."**

- Internal image/concrete reference -
a local bridge (concrete/based on experience)
- Extension of contexts -
the Golden Gate bridge (based on learning)
- Extension by analogy -
"London Bridge is falling down" (game)
- Abstract/Figurative -
"The bridge between the US and Russia is
tenuous"
"Can you ever bridge the generation gap?"
"Don't burn all your bridges."



A Research Perspective

Metalinguistic skills are often distinguished as having to do with

- ▶ *Epilinguistic capacity* -- monitoring of the actual speech production
(Turner, Bowey, Pratt, & Herriman, 1984).
- ▶ *Metalinguistic awareness* -- ability to see words as decontextualized objects
and manipulate and analyze them apart from content and production
(Gombert, 1992; Shulman & Capone, 2010).
- ▶ *Metalinguistic awareness* has its foundation in *semantic, syntactic, and
pragmatic (linguistic) awareness*.



A School-Age Perspective

Developmental Stage Three (Ages 6 to 10)

- Begins to take listener perspective and use language form to match
- Understands that words can have two meanings as in verbal humor involving linguistic ambiguity (riddles)
- Resolves ambiguity:
 - 1) **lexical** as in homophones,
 - 2) **deep structure** as in ambiguous phrases
("Will you join me in a bowl of soup?"),
 - 3) **phonological/morphemic**
Q: "What do you have if you put three ducks in a box?"
A: "A box of quackers."
- Re-sequences language elements, as in pig Latin



An Adolescent Perspective

Developmental Stage Four (Ages 10+)

- Extends language meaning into hypothetical realms to understand **figurative language** such as metaphors, similes, parodies, analogies, etc.
- Manipulates various **speech styles** to fit a variety of contexts and listeners

Wallach, G. P., & Miller, L. (1988).



Metalinguistics and Language Disorders

- ▶ Students with language disorders, who have received language intervention to establish the fundamentals of semantic, syntactic and pragmatic knowledge in the early grades, may not have acquired adequate metalinguistic awareness.
- ▶ They may still show inadequacies in:
 - semantic flexibility* (e.g., multiple meanings and word uses)
 - syntactic flexibility* (e.g., paraphrasing, indirect uses).
- ▶ On CELF-5, They may *perform in the average or low-average range*.
- ▶ Those students may not have crossed the bridge to metalinguistic awareness and metacognitive abilities that are separate from linguistic skills – *“Paid the Toll”*

METALINGUISTIC DIFFICULTIES

- Recognizing syllable, word, phrase, clause, and sentence boundaries in speech/print
- Playing with language (riddles, jokes, rhymes)
- Analyzing and talking about language
- Planning for production of statements, questions, paragraphs, stories in speaking and writing
- Self-monitoring, self-correcting, and editing speech and writing
- Identifying and correcting inefficient communication approaches and behaviors
- Making predictions and forming hypotheses
- Problem-solving for strategic language use



CELF 5
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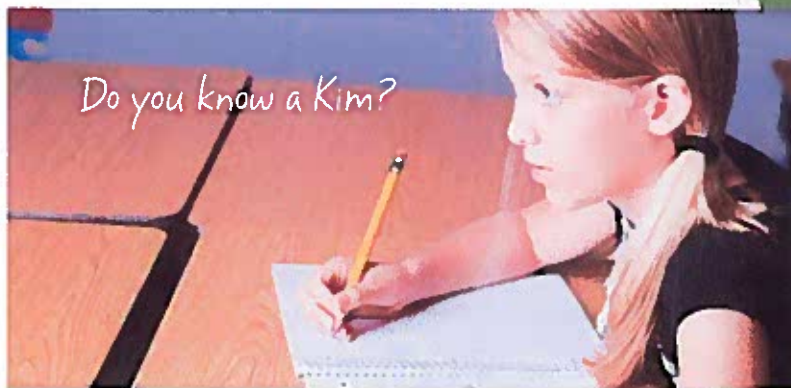
Metalinguistics and Literacy

- **Reading comprehension** and metalinguistic skills are **strongly linked** (Achugar, Schleppegrell, & Oteiza, 2007)
- **Explicit teaching** about language and using language as a tool is **important for literacy development** (Achugar, Schleppegrell, & Oteiza, 2007; Enright, 2013; Fang & Schleppegrell, 2010)
- **Teaching multiple meanings** (homonyms) and ambiguity detection skills to 3rd graders improves reading comprehension (Zipke, Ehri, and Cairns, 2009)
- **Metalinguistic facility** is essential in the writing process for initial production (composition) and revision (editing), as writers choose words, analyze communicative intent, and assess syntax for both functions (Myhill & Jones, 2007; Myhill, 2012).



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Evaluating Metalinguistic Awareness





An Assessment Perspective

CEL F-5 Metalinguistics focuses on the evaluation of metalinguistic awareness as demonstrated by being able to

- ▶ *talk about,*
- ▶ *analyze, and*
- ▶ *think about language*

independently of the concrete meanings of words.

In other words, the student must make a momentary shift from the content or meaning to the form or linguistic expression. (Edwards & Kirkpatrick, 1999)

A step-wise approach to assessment

Case: Kim is a 9-year old girl with reading and writing problems. Her grades are failing in Language Arts and Science.

"Are deficits related to cognitive ability?"

WISC-V:

Verbal Comprehension	102 (89-101)
Perceptual Reasoning	104 (98-110)
Processing Speed	84 (78-92)
Working Memory	79 (73-85)



A step-wise approach to assessment

"Are reading difficulties related to phonological skills or retrieval deficits?"

KTEA-3: Phonological Processing 94
Rapid Automatic Naming 81

WIAT-III: Written Expression 78

Essay Composition showed a specific deficit in grammar and mechanics.



Case Study Summary

Index Scores

Core Language	84
Receptive Language	90
Expressive Language	75
Language Content	95
Language & Memory	80

Difficulties with language structure, especially formulation of compound and complex structures.



• Total Metalinguistic Index	72 (66-78)
• Meta-Pragmatics Index	82 (73-91)
• Meta-Semantics Index	73 (74-88)
• Metalinguistic Profile	7
• Making Inferences	9
• Conversation Skills	5
• Multiple Meanings	6
• Figurative Language	4



Learning Objectives

- 1) To develop knowledge and expressive use of compound and complex sentences for speaking, written language expression, and editing and revising (i.e., syntactic flexibility)
- 2) To develop conversation and narrative writing skills, as they apply to the descriptive, expository, and emerging argumentative genres (i.e., narrative structure).
- 3) To develop awareness of multiple meanings and ambiguities in spoken and written sentences and text (i.e., semantic flexibility)
- 4) To develop knowledge of idiomatic and figurative language use in spoken and written expression and awareness of humor and sarcasm.





Supporting Strategy Acquisition

Bloom's Taxonomy and Levels of Knowledge
Strategies for Semantic Flexibility
Strategies for Syntactic and Conversational Flexibility



Strategic Inefficiency

- **“Strategic inefficiency”** is a central problem in children and adolescents with language and learning disabilities (Bernstein & Seidenberg, 1988; Feuerstein, 1981; Larson & McKinley, 1987; Swanson, 1988; Torgesen, 1977a, 1977b, 1986)
- Acquiring cognitive and metalinguistic strategies is a goal-directed activity and the learner must participate actively (Bruner et al., 1966; Flavell, 1971; Piaget, 1952, 1968, 1970)
- Strategy acquisition is a process that can be directed by a speech-language pathologist, special educator, teacher or coach, but the learner must “drive” the process.

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Bloom's Taxonomy

Bloom (1956) provided educators with a taxonomy for developing critical thinking and strategy acquisition. The process has levels and is recursive. At any level the educator may direct a student to return to a lower level and go through the process again.

Combining parts to make a new whole	Create
Judging the value of information or ideas	Evaluate
Breaking down information into component parts	Analyze
Applying the facts, rules, concepts, and ideas	Apply
Understanding what the facts mean	Understand
Recognizing and recalling facts	Remember

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General Approaches

Cognitive Mediation -- A process in which the educator serves as guide for thinking, reasoning and problem solving.

Guided Questioning -- Using open-ended questions (e.g., Bloom's taxonomy of Wh-questions) to lead the direction for responding.


Scaffolding -- Providing a structure or context to support thinking and responding and slowly withdrawing the support with success.

Acceptance of Responses -- All responses must have a chance to be evaluated.

Non-Judgmental -- Avoid giving any signs of a negative judgment of a response.


Peer or Self Evaluation -- Initiate and guide peer and self evaluation.

Visual Maps and Organizers -- Structured visual input to facilitate critical thinking.



Levels of Knowledge

- **Factual Knowledge**
 - Knowledge of words and their meanings (basic vocabulary)
 - Knowledge of subject-specific terminology
- **Conceptual Knowledge**
 - Knowledge of semantic categories and classification (concepts)
 - Knowledge of generalizations, models and structures (expressions)
- **Procedural Knowledge**
 - Knowledge of linguistic domain-specific skills, rules and structures (e.g., syntax)
- **Metacognitive Knowledge**
 - Metalinguistic knowledge (e.g., making inferences, figurative uses, humor)
 - Strategic knowledge of approaches to specific linguistic tasks (e.g., conversation, narrative structure, text genres)



Semantic Flexibility

Objective: to expand the meanings of words on the 'Word Wall' by forming relationships among words and their meanings

Methods

- **Semantic classification, subgrouping, and reclassification**
 - Group words on the 'word wall' into semantic categories (e.g., all animals, foods, clothing items, etc.)
 - Develop subgroups (e.g., animals --- birds, farm, predators)
 - Reclassify based on shared features (e.g., characteristics, habitat)
- **Compare and contrast strategies**
 - Select two or more examples from a semantic class (e.g., animals - dog, fox, wolf)
 - Discuss shared and non-shared characteristics (e.g., tame - wild)



CEL F5 Semantic Flexibility

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The Process

- “Today’s key words are *discussion, negotiation, treaty, peace.*”
“What do they mean?”
“Which of the words can go together?”
(e.g., ‘discussion’-‘negotiation,’ ‘negotiation’ - ‘treaty,’ ‘treaty’ - ‘peace’)
- “How do the meanings of the two words you chose relate to each other?”
(e.g., communication, formal contract)
- “How do the words ‘discussion’ and ‘negotiation’ relate to the meanings of the words ‘treaty’ and ‘peace?’” *(e.g., cause-effect, outcomes)*
- “What other words can you think of with meanings that relate to ‘discussion’ and ‘negotiation?’” *(e.g., argument; compromise)*
“What other words can you think of that relate to ‘treaty’? And ‘peace?’”
“How do they connect?”
- “Can you think of important situations where the words can be or have been used?”




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“Meaning Triangles”

- ▶ You can expand the intervention by using game-like activities for building understanding of relationships among words and concepts. One such activity may be called “Meaning Triangles.”
- ▶ The basic format consists of one or more triangles, each of which is used to elicit words and concepts that have relationships to each other.
- ▶ Consider as an example the triangle below. Each point is associated with a written word. Here the words are ‘ask,’ ‘demand,’ and ‘beg.’ inside the triangle is one of several concepts, ‘negotiation,’ that can serve to connect the three words.



negotiation

- ▶ You can draw a triangle and write two words at the tips of the triangle. Ask students to come up with two or three words that are related to the two given words and lastly ask for the concept that connects the three words.
- ▶ You can change how you start and begin with a concept written in the middle, one word at a point of the triangle, or the concept and one related word.



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Multiple Meanings

The Process

- Today's topical key word is *glass* and its many meanings.
- Elicit spontaneous meanings and interpretations of the word
 - "What do you think of when you hear the word 'glass'."
- Present a different context for the given word (picture or sentence).
 - "What does *glass* refer to/mean when it is used in this situation" (e.g., show a window or say "The ball broke the window.")
- Brain storm other contexts in which the multiple word *glass* can be used (e.g., *eyeglasses*, *containers of various kinds*)
- Broaden the use of the given word by using it in sentences that relate to various contexts and interpretations
 - "Where else can we use the word 'glass'?"
- Continue with figurative uses of the word 'glass.'
(e.g., *glass ceiling*; *glasshouse*)




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Figurative Language

The Process

- Identify the word or phrase in a sentence that is the key to the figurative interpretation (e.g., *bridge*).
- "Their shared hobby bridged the generation gap between grandfather and grandson."
- Elicit a spontaneous interpretation of the word 'bridge' and what it means in different concrete contexts (e.g., *rivers*, *railroads*).
- "Where do you find a bridge in everyday life? What does the bridge do in that situation?"
- Brain storm possible figurative interpretations for 'to bridge a gap' (e.g., *form connection*, *understanding between one and the other*)
- Broaden the use of the given word to related contexts and figurative interpretations (e.g., *burn bridges*).




Specific 'Figurative' Strategies

Directional terms

- forms of UP and AHEAD have positive connotations
- forms of DOWN and BEHIND have negative connotations
- *Examples: "Things are looking up," "I feel down today," "He is on top of the world." "I am glad to have that behind me."*

Common concepts

- Time is viewed as money -- *"Let's save time," "...running out of time."*
- Containers hold conditions, etc. - *"My cup runneth over," "He sees the glass as empty; I see it as half full."*
- Body parts also serve as concepts. 'Hands' are viewed as containers - *"She came empty handed."*



Inferences and Predictions

The Process

- Identify essential aspects of the context.
"Laura was on her way to work when she saw a sign for a donut shop."
- Identify conditions of the actor or participants
"She had forgotten breakfast in her haste to get on the way."
- Brain storm available options for actions
(e.g., stopping for coffee, donuts, muffins or continuing to work)
- Consider priorities among options and outcomes
(e.g., stop and be late; get food and work better)
- Select an option based on probability or desirable outcome
"It was worth resisting the temptation."



Humor and Sarcasm

The Process

- Identify contrasts between the context and the message.
(situation, word meaning, tone of voice, facial expression or body language)
- Determine which aspects are neutral, positive or negative *(verbal message, tone of voice, facial expression, body language)*
- Given the context or interaction, which channel of communication has the greatest impact *(verbal message, tone of voice, facial expression, body language)*
- Consider the interpretation as being factual, humorous or sarcastic *(humor is essentially positive; sarcasm is essentially negative)*
- Select an option based on explicit discussion of options or on life experiences.



Syntactic Flexibility

Objectives: to expand the repertoire of sentence structures by combining and paraphrasing sentences

Methods

- Combining phrases and simple sentence structures
 - Coordination of phrases (e.g., and, or, but)
 - Subordination of clauses (cause-effect, spatial, temporal)
- Inserting relative clauses (that, which, who)
- Rearranging elements of a sentence to change the intent (e.g., statement to question)
- Editing text



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Conversational Flexibility

Objective: to develop conversational script knowledge and approaches to and flexibility in beginning or entering a conversation, changing topic or ending a conversation

The Process

- **Topic** -- Select a concrete topic for conversation (use illustrations, personal experience, hobbies, current events)
- **Options** -- Brain storm for topical focus options or alternatives for the conversation
- **Script** -- Develop a **process diagram** for the interactions in a conversation based on analyzing the steps in a conversation from a cartoon, TV show, text, script for a play or other resource (initiating, following up/responding, creating ties, elaborating on topics and themes, ending a conversation)



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Conversational Flexibility

The Process

Context -- Analyze and evaluate the context, participants, themes and topics (current events, seasonal issues, continuing a topic, etc.)

Relevance -- Evaluate the relevance of the topic to be introduced

Lead-in -- Consider options for a lead-in to begin or to enter a conversation ("Have you..., Did you..., What/why/how/when/where")

Responding -- Analyze the options for responding to an ongoing conversation (picking up on wordings, relevance, themes or topics to create ties)

Diverting -- Consider options for diverting the theme or topic of an ongoing conversation (preferences, anxiety, stress or emotional reactions)

Ending -- Consider options for ending a conversation

Editing - Change the content of turn units in cartoons, skits, stories, plays

Dos and Don'ts for Submitting Forms for ASHA CEUs

DO

- ▶ Attend the entire 60 minutes of the live session
- ▶ Complete the
 - ▶ Attendance Sheet (only if more than one person is at your site)
 - ▶ ASHA Participant Form
 - ▶ Evaluation Form
 - ▶ Forms are found in the reminder email sent by sherry.tokken@pearson.com

- ▶ Mail the forms postmarked by **11-16-16** to
 - Darlene Davis, Pearson
 - 19500 Bulverde Road, Ste. 201
 - San Antonio, TX , 78259

Questions about CEUs?

Contact Darlene Davis at darlene.k.davis@pearson.com

Do not

- ▶ Mail CE forms that will be postmarked after **11-16-16**
- ▶ Fax or email completed CE forms
- ▶ Send your CE forms directly to ASHA
- ▶ Submit CE forms for "partial credit" [not available]
- ▶ Submit CE forms for listening to the webinar recording on PearsonClinical.com or speechandlanguage.com.

