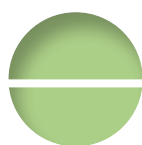# CELF®5

METALINGUISTICS

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Test Objectives and Descriptions

PEARSON

Overview

Clinical Evaluation of Language Fundamentals Metalinguistics®–Fifth Edition

The Clinical Evaluation of Language Fundamentals Metalinguistics®–Fifth Edition (CELF–5 Metalinguistics) is a revision of the Test of Language Competence–Expanded. CELF–5 Metalinguistics is designed to identify students 9-21 years old who have not acquired the expected levels of communicative competence and metalinguistic ability for their age. Metalinguistic awareness involves the ability to reflect on and distance oneself from language and to view it as a tool (Owens, 2010). In order for language to become a strategic tool, the student must be able to talk about language, analyze it, and think about it independent of the meaning (content). The student must be able to think about language in the abstract, apart from the literal meaning.

CELF-5 Metalinguistics is a clinical tool that can be used to assess a student's ability to make inferences, construct conversationally appropriate sentences, understand multiple meaning words and ambiguous sentences, and understand figurative language. The test may be used for initial diagnosis of a language disorder, to evaluate metalinguistic aspects of a social (pragmatic) communication disorder, or as a complement to and extension of the social-pragmatic communication skills assessed by CELF-5.

Importance of Metalinguistic Awareness

CELF-5 Metalinguistics focuses on the evaluation of metalinguistic awareness, which is demonstrated when a student is able to talk about, analyze, and think about language independently of the concrete meaning of each word. In other words, the student must make a momentary shift from the content or meaning of the message to the form or linguistic expression (Edwards & Kirkpatrick, 1999). Metalinguistic awareness has its foundation in semantic, syntactic, and pragmatic (linguistic) awareness (Benelli, Belachhii, Gini & Lucangelli, 2006; Tunmer & Bowey, 1984; Shulman & Capone, 2010; Tunmer & Grieve, 1984; Pratt & Nesdale, 1984). For example, defining a word is a metalinguistic skill that taps the ability to use language to analyze language (Owens, 2008; Wiig, Semel & Secord, 2013). Word definition requires the student to access stored semantic (lexical) knowledge, analyze the meanings of the word in terms of similarities to and differences from other words in the same semantic class, and describe these features using other words.

Once a student has developed the foundations of semantic and syntactic knowledge, she or he gradually recognizes that objects or actions are not innately tied to the words used for naming them (Berko-Gleason & Bernstein-Ratner, 2009). Language becomes a cognitive construct as the student's linguistic awareness develops (Shulman & Capone, 2010); like other constructs, language can be manipulated to express such things as indirectness and politeness. Metalinguistic awareness, of which linguistic awareness is a skill, becomes evident around ages 7 or 8 and is essential in literacy development. Metalinguistic awareness develops throughout the school years, and allows the student to interpret multiple meaning words and expressions, engage in humor and sarcasm, and use figurative expressions that go beyond the literal meanings (Berko-Gleason & Bernstein-Ratner, 2009; Owens, 2008; Shulman & Capone, 2010). Since nearly two thirds of spoken English is figurative in nature, the ability to "play with language" by manipulating syntax and semantics in a way that creates more than one meaning is highly important (Arnold & Hornett, 1990; Zipke, 2007). CELF-5 Metalinguistics assesses the maturation of metalinguistic awareness and ability as it relates to the semantic language domain in two tests, Multiple Meanings and Figurative Language. Performance scores on these two tests can be used to derive a Meta-Semantics Index score.

Metalinguistic ability also encompasses pragmatic skills such as interpretation and use of linguistic skills that are appropriate in a social context (ASHA, 2011; Shulman & Capone, 2010). Metalinguistic ability involves the appropriate understanding of language content as it relates to the larger communication context and the expression of appropriate responses to the communicative demands of the situation (Tunmer & Harriman, 1984). Spontaneous, natural interactions between mature language users requires that language content and function be integrated according to the rules or demands of specific communication contexts. These requirements should not be viewed as independent components or constructs. This is because the demand for congruency between content and function might emphasize semantic skills, while the demand for responding to the communicative context might emphasize pragmatic skills.

CELF-5 Metalinguistics contains two tests that probe meta-pragmatic awareness and ability, Making Inferences and Conversation Skills. Of these, Making Inferences places demands on going beyond the given information by considering the communicative context for short paragraph-length vignettes. Conversation Skills places demands on the student to respond to semantic and contextual constraints and express intents appropriately during a conversation. In both tasks, theory of mind, the ability to infer what others might be intending or thinking, plays a major role (Nelson, 2010; Premack & Woodruff, 1978). Performance scores on the Making Inferences and Conversation Skills tests can be used to derive a Meta-Pragmatics Index score.

The CELF–5 Metalinguistics assessment process helps clinicians:
- Evaluate the student's metalinguistic skills in natural communication contexts using the Metalinguistics Profile.
- Determine if a student has a language disorder using the Total Metalinguistics Index Score.
- Describe the nature of the language disorder using the Meta-Semantics Index and the Meta-Pragmatics Index.
- Determine the types of items that cause difficulty for the student and the most common error patterns exhibited by the student.
- Determine the point at which a student can be successful given test task modification via extension testing.

Summary at a glance

- Metalinguistics Profile

- Making Inferences

- Conversation Skills

- Multiple Meanings

- Figurative Language

Metalinguistics Profile (MP)

Objective

To obtain information about a student's metalinguistic skills in everyday educational and social contexts. The information complements the evidence of metalinguistic strengths and weaknesses identified by the other tests that comprise the CELF-5 Metalinguistics test battery.

Format

The Profile is a questionnaire that targets three areas: Words, Concepts, and Multiple Meanings; Inferences and Predictions; and Conversational Knowledge and Use. After observing a student, and, if needed, with information provided by one or more informants who are familiar with the student, such as parents/caregivers and/or teachers, the examiner rates each item on the questionnaire using a 4-point scale (similar to a Likert scale).

Relationship to Curriculum and Classroom Activities

The skills that are evaluated link to curriculum objectives for metalinguistic skills such as making inferences and predictions, understanding and using figurative language, understanding that words and sentences can have multiple meanings, and exhibiting appropriate discourse skills such as differentiating between situations that require formal and informal registers. As students move from one grade to the next, there is an expectation that their metalinguistic abilities and language competence will increase to keep up with the demands of curricular and non-curricular activities.

Implications for Intervention

Students who score below average on the Metalinguistics Profile may have difficulty fully accessing the curriculum and understanding peer interactions. Item analysis will identify those areas most impacted and provide direction for intervention.

Metalinguistics Profile

Because items in this scale can be culturally influenced (especially those in the Conversational Knowledge and Use section), you must be familiar with expected and culturally-appropriate behaviors for individual students. Make sure that you consider cultural influences in rating the student's nonverbal and verbal communication. You may need to ask the student's parent/guardian or a consultant familiar with the student's culture if his or her behavior or skill level is expected within that culture. If you are rating a two-part skill (e.g., Item 1: understands and uses…) and you think the examinee's skills are not consistent across both parts, circle the skill you are rating (e.g., uses).

For each item, circle the number that best describes how often the examinee demonstrates that skill or behavior.
1 = **never or almost never**
2 = **sometimes**
3 = **often**
4 = **always or almost always**

Words, Concepts, and Multiple Meanings
As culturally appropriate, the student...

	Never or Almost Never	Sometimes	Often	Always or Almost Always
1. understands and uses abstract words appropriate for age/grade (e.g., kindness, paradigm)	1	2	3	4
2. understands and uses multiple meaning words appropriately for age/grade (e.g., tip, office)	1	2	3	4
3. uses knowledge of sentence structure to interpret ambiguous sentences (e.g., The chicken was ready to eat.)	1	2	3	4
4. understands the use of personification in spoken and written forms (e.g., The Daily News was the first to report the error.)	1	2	3	4
5. understands slang introduced by peers and uses it appropriately	1	2	3	4
6. understands idiomatic expressions (e.g., She is pulling my leg.)	1	2	3	4

Metalinguistics Profile Item Analysis	
Category	**Item**
Vocabulary (High-Level/Abstract)	1 2 4 21
Ambiguity Detection	2 3 5 9 10
Figurative Language	4 6 7 8 9
Inferences	8 11 14 16 19 20
Predictions	12 13 15 16 17 18
Conversational Rules/Rituals	5 9 10 19 20 22 23 30
Conversational Repair/Redirection	28 29
Topic Introduction/Maintenance	21 24 25 26 27

Making Inferences

Objective

To evaluate the student's ability to identify and formulate logical inferences on the basis of existing causal relationships or event chains presented in short narrative texts.

Format

The student listens to the examiner describe a situation by its beginning and ending. The situation is also presented visually in text form in the Stimulus Book. The student then identifies the best two out of four reasons given for the ending and provides an additional reason in addition to the ones listed in the Stimulus Book.

Relationship to Curriculum and Classroom Activities

The meta-pragmatic abilities evaluated in this test relate to curriculum objectives for classroom language, speaking, listening, and literacy for Grades 3 and up. These objectives require students to be able to identify, understand, and form meaning from implied information in spoken and written discourse. The ability to identify and understand implied information presented orally, in stories and in descriptive, expositive, or argumentative texts is important for creating meaning in social contexts and for achieving academic success (Norbury & Bishop, 2002; Adams, Clarke & Haynes, 2009).

Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item and error analysis tables. The student's item and error response patterns provide evidence of the student's metacognitive and meta-pragmatic awareness skills that are inadequate for understanding implied information. Interventions that focus on accessing relevant world knowledge to support the identification of missing (implied) information and making logical inferences have proven effective (Norbury & Bishop, 2002). Developing or modeling cognitive strategies associated with, for example, critical thinking (e.g., analysis, synthesis, evaluation, and application; asking why questions) also support this metalinguistic skill (Roth, Speece & Cooper, 2002; Benelli, Belachhii, Gini & Lucangelli, 2006; Nash & Snowling, 2006; Larsen & Nippold, 2007; Pressley, 2000).

The students had to go safely outside for a fire drill. After the fire drill, Amy and Gary were called to the principal's office.

Amy and Gary were called to the principal's office after the fire drill because:

a. They talked loudly during the drill.
b. They walked out of the building quietly.
c. They ran outside instead of walking.
d. They both have a parent who is a firefighter.

Making Inferences Error Analysis: Multiple Choice Responses

Error Category	Item Response Option
Inference Contradicts Scenario	1a 1c 2c 3b 3c 5c 5d 6a 7b 9b
Inference is Related, but Not Key	2d 6d 7d 9c 10b 12a 12b
Inference is **Not** Related and **Not** Relevant	4b 8a 11a 11d
Inference Ignores Key Element of Scenario	4a 8c 10d

Making Inferences Item Analysis: Lead-in Scenario

Item Category	Item
Pragmatic (Emotional Inference)	1 2 4 5 8 11 12
Semantic (Casual Inference)	1 2 3 4 5 6 7 8 9 10 11 12
Linguistic (Anaphoric Inference)	2 5 9 10 11 12

Making Inferences Item Analysis: Open-Ended Responses

Error Catagory - 1 point responses	Item
Vague/Confusing/Incomplete Thought	1 2 3 4 5 6 7 8 9 10 11 12
Possible, but Not Likely	1 2 3 4 5 6 7 8 9 10 11 12
Combination of Correct and Incorrect Logic	1 2 3 4 5 6 7 8 9 10 11 12

Error Catagory - 0 point responses	Item
Illogical	1 2 3 4 5 6 7 8 9 10 11 12
Restatement or Paraphrase	1 2 3 4 5 6 7 8 9 10 11 12
Direct Contradiction of Lead-in Statement	1 2 3 4 5 6 7 8 9 10 11 12
Requires Multiple Leaps of Logic	1 2 3 4 5 6 7 8 9 10 11 12
Doesn't Answer the Why Question	1 2 3 4 5 6 7 8 9 10 11 12
Off-Topic/Ignored Lead-in Scenario	1 2 3 4 5 6 7 8 9 10 11 12

Conversation Skills

Objective

To evaluate the student's ability to (a) initiate a conversation or respond in a way that is relevant and pragmatically appropriate to the context and audience while (b) incorporating given words (semantic units) in semantically and syntactically correct sentences.

Format

The examiner presents a picture scene that creates a conversational context and says two or three words to the student. The words are also printed above the pictured scene. The student formulates a conversationally and pragmatically appropriate sentence for the given context using all of the target words in the form (tense, number, etc.) provided.

Relationship to Curriculum and Classroom Activities

The meta-pragmatic abilities evaluated relate to curriculum objectives for classroom language, speaking, listening, and literacy for Grades 3 and up. These objectives require students to be able to successfully take part in conversations in varied contexts and with various conversational partners, make effective choices for meaning according to context, describe intentions and thoughts, and evaluate responses by characters to given situations. The same meta-pragmatic skills that facilitate effective oral expression have been shown to apply to written expression (Myhill & Jones, 2007; Troia, 2011) Writing may be viewed as a form of communication for social purposes aimed at achieving social interaction goals (Troia, 2011).

Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item and error analysis tables. The student's item and error response patterns provide evidence of meta-pragmatic skills that are inadequate for social communication and literacy. Explicit teaching about using language as a tool has proven important for literacy development (Achugar, Schleppegrell & Oteiza, 2007; Enright, 2013; Fang & Schleppegrell, 2010). Interventions that focus on establishing fundamental linguistic skills for formulating compound and complex sentences often required when speaking in discourse genres such as conversation have also proven effective (Bishop & Donlan, 2005; Marinellie, 2004; Scott & Windsor, 2000). An example of this type of intervention is sentence combining, which develops syntactic complexity and flexibility (Nelson, 2010). Assigning peer models, peer tutoring, and structured role-playing are among other approaches to intervention that have proven effective (Brinton & Fujiki, 2006; Hess & Fairchild, 1988; Nelson, 2010).

Conversation Skills: Semantic-Syntactic Function Item Analysis

Category	Item
Noun	1 (chocolate), 2 (toast), 3 (practice), 4 (walk), 5 (watch), 6 (job), 7 (corn), 10 (inside), 10 (cat), 13 (now), 15 (napkins), 16 (week)
Pronoun	7 (either), 8 (myself), 16 (either), 16 (some)
Verb	2 (toast), 3 (practice), 4 (walk), 5 (watch), 7 (have), 11 (worried)
Auxiliary Verb	4 (might), 14 (might)
Adjective	1 (chocolate), 3 (practice), 6 (job), 6 (important), 7 (either), 8 (hard), 10 (inside), 11 (worried), 12 (wrong), 13 (tough), 14 (different), 14 (regardless), 15 (difficult), 16 (either), 16 (some), 17 (colorful)
Adverb	2 (when), 4 (since), 5 (carefully), 7 (either), 8 (hard), 9 (rather), 9 (before), 9 (after), 10 (inside), 10 (however), 12 (actually), 12 (wrong), 13 (tough), 13 (now), 13 (nonetheless), 14 (different), 14 (regardless), 16 (either), 17 (especially)
Preposition	6 (but), 9 (rather than),* 9 (before), 9 (after), 10 (inside), 11 (during), 14 (regardless of)*

Conjunctions	Item
Coordinating	1 (and), 6 (but), 17 (or)
Subordinating	2 (when), 3 (if), 4 (since), 5 (while), 8 (even though), 9 (rather than),* 9 (before), 9 (after), 10 (however), 11(if), 12 (although), 13 (now), 15 (unless)
Correlative	7 (either), 16 (either), 17 (or)

Conversation Skills: Content, Use, and Form Error Analysis

Pragmatic Errors	Items
Pragmatic Deviation/Awkward	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Comment, not Dialogue	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Doesn't Match Pictured Scene	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Illogical/Nonsensical	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Vague/Incomplete Thought	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Semantic Errors	Items
Semantic Deviation (vague, overused, or incorrect non-target word used)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Missing 1 or More Target Words	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Misuse of Target Word (change word meaning)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Syntactic Errors	Items
Syntactic Deviation (syntax or morphology error)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Misuse of Target Word (change form)	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Two (or more) Sentences	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Sentence Fragment	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

Multiple Meanings

Objective

To evaluate the student's ability to recognize and interpret different meanings of selected lexical (word level) and structural (sentence level) ambiguities.

Format

The examiner presents a sentence (orally and in text) that contains ambiguity at either the word or sentence level. The student is asked to describe two meanings for each sentence that is presented.

Relationship to Curriculum and Classroom Activities

The meta-semantic abilities evaluated in this test relate to curriculum objectives for knowledge of language, language acquisition and use, and literacy for students in grades 3 and up. These standards require students to be able to detect and interpret multiple word meanings and the contexts within which they are used for listening and reading comprehension. The test also requires students to use syntactic skills to parse sentence types they perceive to contain structural ambiguities; these syntactic skills are acquired later than their semantic counterparts. Evidence suggests that ambiguity detection is correlated to reading achievement (Cairns, Waltzman & Schlissleberg, 2004).

Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item analysis table. The student's item response patterns provide evidence of meta-semantic or syntactic skills that are inadequate for social communication and literacy. Explicit teaching about identifying word (lexical) or sentence-level (structural) ambiguities supports recognition and interpretation of ambiguous expressions and, in turn, metalinguistic and literacy development (Achugar, Schleppegrell & Oteiza, 2007; Enright, 2013; Fang & Schleppegrell, 2010; Zipke, Ehri & Cairns, 2009). Interventions to improve syntactic skills required for resolving sentence-level ambiguities may also focus on establishing grammar skills for parsing simple and complex sentences.

Your glasses are dirty.

MM | Trial 1
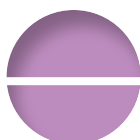
Multiple Meanings Item Analysis	
Category	Item
Lexical	1 2 3 4 5 7
Structural	6 8 9 10 11 12 13 14 15

Figurative Language

Objective

To evaluate the student's ability to a) interpret figurative expressions (idioms) within a given context and b) match each expression with another figurative expression of similar meaning.

Format

The examiner presents a situation (e.g., a girl talking to a friend about a flat tire) and an expression one of the characters uses within that context (e.g., I have to change the tire, so would you give me a hand?) Both the situation and the expression are presented verbally and visually (in text). The student is asked to describe what the expression means. Next, the examiner verbally and visually presents four other figurative expressions and asks the student to select the one with the meaning that is closest to the first expression.

Relationship to Curriculum and Classroom Activities

The meta-semantic abilities evaluated in this test relate to curriculum objectives for knowledge of language, language acquisition and use, and literacy in Grades 3 and up. These objectives require that students be able to identify and interpret non-literal language, as in idioms, metaphors and similes. This requires mental manipulation of semantic units (words, phrases, sentences) with minimal contextual support. Performance on and intervention with similar meta-semantic tasks has been found to correlate with reading comprehension and vocabulary (semantic) knowledge (Zipke, 2007; Zipke 2008).

Implications for Intervention

If the student receives a below average score, you can analyze his or her errors according to the categories in the item and error analysis tables. The student's item and error response patterns provide evidence of meta-semantic skills that are inadequate for understanding non-literal language. Metaphor comprehension can be fostered by direct, explicit teaching of strategies (Abrahamsen & Smith, 2000; Ezell & Goldstein, 1992), such as differentiating negative (e.g., bad) versus positive (e.g., good) interpretations based on the embedded words for orientation/direction (e.g., down = bad versus up = good) (Lakoff & Johnson, 1980). In addition, intervention approaches that use scaffolding procedures in which supportive contextual cues are provided initially and then withdrawn when appropriate have been shown to be effective (Gibbs, 1987; Nippold & Martin, 1989; Qualls & Harris, 1999), as well as mental imagery procedures that help to strengthen meta-semantic awareness for idioms (Nippold & Duthie, 2003). For students diagnosed with language disorder and ASD, interactive group activities that focused on idiom comprehension, such as discussion of idioms presented in context and mental imagery procedures, proved effective in idiom comprehension and retention (Abrahamsen & Smith, 2000; Ezell & Goldstein, 1992).
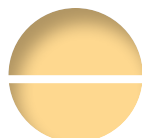
Situation: **A girl talking to her friend about a flat tire**

Expression: **"I have to change the tire, so would you give me a hand?"**

FL │ Trial 1

Figurative Language Item Analysis: Open Ended	
Idiom Category	Item
Transparent Meaning	2 4 5 9 10 11 12 13 15 16
Opaque Meaning	1 3 6 7 8 14 17
Figurative Language Error Analysis: Open Ended	
Error Category	Item
Literal Meaning	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Close in Meaning	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Unrelated Meaning	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17
Figurative Language Error Analysis: Multiple Choice	
Error Category	Item
Opposite Expression	1c 2b 3b 4c 5b 6a 7a 8b 9a 10d 11c 12a 13d 14a 15b 16b 17b
Literal Expression	1b 2a 3d 4b 5c 6d 7b 8d 9b 10c 11d 12c 13b 14c 15d 16c 17c
Unrelated Figurative Expression	1a 2d 3c 4d 5a 6c 7d 8c 9c 10a 11b 12b 13a 14d 15a 16d 17a

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