

# **Observation of Spontaneous Expressive Language (OSEL)**

## **Administration and Scoring Manual**

### **STANDARDIZATION**

#### **Activities**

- 1** Play Figure Assembly
- 2** Clarifications
- 3** Telling a Picture Story  
(Picture Series: Frog Story, Pool Story, or Wake Up Brother Story)
- 4** Conversation
- 5** Camping Trip
- 6** Where Is It? Game
- 7** Retelling a Story: *Where Are My French Fries?*
- 8** Picture Description  
(Single Picture: Balloon Vignette or Painting Vignette)

## Description of the Instrument

The Observation of Spontaneous Expressive Language™ (OSEL™) is a semistructured, standardized assessment of morphosyntactical (language forms), semantic (language content), and pragmatic (language use) aspects of spontaneous expressive communication for children with developmental and communication disorders. The OSEL assessment is intended to be used with children with a variety of conditions that affect expressive language use, including autism spectrum disorder, pragmatic language disorder, specific language disorder, early language or developmental delay, and intellectual disabilities. The OSEL can be used with children with language levels ranging from a minimum expressive vocabulary size of 50 to 100 words with emerging word combinations to beginning use of complex sentence structures. The OSEL targets a chronological age range between 2 and 12 years of age for children with significant language disorders and up to a chronological age of about 5 years for children with milder language disorders.

Young and/or developmentally delayed children frequently communicate more easily when interesting toys are available and when they are engaged in enjoyable activities. Thus, specific tasks, mostly play based, were developed to provide sufficient opportunities for spontaneous language production. All tasks have been developed with particular linguistic structures in mind; however, the tasks are also intended to provide sufficiently broad contexts to give the child freedom and flexibility to demonstrate a variety of communicative or pragmatic skills, such as making requests, asking questions, suggesting ideas, or telling about recent experiences.

## General Administration Guidelines

The OSEL is intended to elicit spontaneous language to allow assessment of a child's *functional* communication skills. This is in contrast to traditional assessment instruments that often measure *predefined responses* to stimuli in structured situations, such as requiring the child to point to or label pictures or to fill in the blanks, and may be focused on the child's knowledge or ability rather than *use*. The unstructured or semistructured situations with a hierarchy of prompts or cues in the OSEL are organized to provide a more realistic impression of the child's communication than is possible in more structured tests. Thus, the emphasis of this assessment tool is to elicit language as naturally as possible in a conversational manner.

Children with language or communication impairments may avoid or limit use of language structures and communicative situations that are difficult for them. In order to ensure that there are multiple opportunities and contexts for the child to produce target language structures in the OSEL, specific tasks and presses (e.g., prompts designed to elicit certain aspects of language) were developed. These tasks range from structured play with play figures, exploratory play with unusual materials, relatively free and imaginary play contexts, and more structured picture description tasks. Additional conversational presses, which may be applied during any task, are aimed at giving the child opportunities to talk about past and future events, to explain why something happened, to request clarifications, and to describe the emotions and thoughts of the characters involved. Research literature suggests that verb tenses, pronouns, and prepositions, as well as verbalizing emotions and reporting cause–effect relationships, are notoriously difficult for children with specific or pragmatic language impairments or children on the autism spectrum. Therefore, these structures (among others) are specifically targeted by the OSEL.

The OSEL is focused on the child's *spontaneous* use of language. This means that the child's language is only coded when it is used spontaneously. If a child simply repeats what you say, that would not count as spontaneous language use. Therefore, as the examiner, it is important to refrain from describing or labeling materials when they are presented and to pace your use of language to allow the child time to respond spontaneously.

Throughout the administration, you should adjust the levels of support provided and observe how the child's responses vary by the different levels of support. For example, unless otherwise indicated, you should refrain from asking too many direct questions and instead use indirect questions (e.g., "I wonder what we can do next?"), open-ended requests (e.g., "That sounds interesting; I want to know more about . . ."), or conversational/interactional bids ("I wish we had something to eat . . ."). Keep in mind that, within a task, there is often a hierarchy of statements and questions that include a range of leads, prompts, and bids. An example of this is giving the child opportunities to ask for clarifications. Throughout the administration, the child will have up to four opportunities to ask you for clarification in a context of natural conversation (see the instructions for the Play Figure Assembly and Picture Description activities).

Throughout the OSEL administration, specific materials are included to elicit the use of certain words (e.g., "dirty" arm for an adjective, "teeth" and "geese" for irregular plurals). When you introduce these materials, refrain from using those exact words so that the child has an opportunity to use them spontaneously without any prompting or modeling. However, for the use of plural words, when the child is mislabeling some materials (e.g., a child mislabeling geese as ducks), you can label one of the materials correctly without using the exact plural words (e.g., "Oh, you found a goose! There's another one!"), so that the child receives another opportunity to label those materials using correct irregular plurals.

The administration of the OSEL requires a room with a table and chairs that are appropriate for the child's age. An additional table should be set up as a tent during the Camping Trip activity. For younger children (especially those under 5 years of age), a caregiver may need to be present in the room, but this is not required for children at any age. If a caregiver is in the room, the child's utterances directed to the caregiver as well as to the examiner are coded (except for Conversation). When caregivers are in the room, it is important to help them understand that their role is to help the child to feel at ease, especially when the child is initially too reluctant or shy to engage in activities. Encourage the caregiver to respond to the child as he or she normally would, but to also try to avoid prompting the child or providing language for the child, since the focus of the assessment is on the child's spontaneous use of language.

Before the administration, select a set of pictures for the Telling a Picture Story activity and put those in an envelope with the child's name on it. Similarly, select one of the picture vignettes for the Picture Description activity and put the picture in an envelope with the child's name on it.

When administering the OSEL, aim for an administration length of approximately 30 to 45 minutes. You will need to balance allowing enough time for language sampling and note taking while simultaneously keeping the child engaged and limiting the administration to a reasonable length. As you present materials/activities, be sure to pause long enough to allow the child time to respond spontaneously. The instructions for each activity guide you through presentation of the various materials. After all of the materials have been presented, some clinical judgment will be required in determining when to end one task and move onto the next. If a child continues to enjoy the materials, but is no longer using much new language that can be coded for the task, or if several minutes have passed after presenting the last materials/prompts for the task, then it is probably time to move forward, even if the child is still engaged with the materials. You will need to take care to maintain the child's engagement and rapport while moving on to the next task.

The OSEL testing differs substantially from the more common language-based testing, in which a flipbook or question-and-answer type of approach may be used and is often expected by older children and adolescents. When administering the OSEL to older children, be sure to adopt an informal, interactive style that makes use of creativity, imagination, humor, and so on. Although many emerging adolescents may no longer play with toys, many are comfortable showing you how they would have played with similar materials when they were younger, or in using such materials to create imaginative schemes.

# Specific Administration Guidelines

## Beginning the OSEL

Children will vary in the amount of warm-up time needed to establish an initial rapport with you and comfort with the testing situation. Some children may be meeting you for the first time, whereas others may have just completed various other assessments with you. The first activity in the OSEL (Play Figure Assembly) is designed to provide a gentle warm-up activity for the child. If you sense that it is necessary, some brief warm-up time may be spent in the room with the child prior to beginning the Play Figure Assembly activity. For example, this time might be spent doing initial greetings/introductions with the child or speaking with the child's caregiver while the child explores the room.

At some point following the brief warm-up, you should indicate the beginning of the assessment by saying something like **"Let's start with our first game"** and then beginning the Play Figure Assembly activity. Coding for the OSEL should not begin until after you have officially indicated the beginning of the assessment in this way. No language should be coded prior to this official beginning, regardless of the amount of language the child may have displayed. This is important in order to ensure that each administration of the OSEL provides each child with roughly the same opportunities for language.

## Specific Task Instructions

### ① *Play Figure Assembly ("The Bowler Family")*

The Play Figure Assembly activity gives the child the opportunity to communicate within a relatively easy and usually familiar play context, namely to construct different play figures ("The Bowler Family"). The relatively low demands of the task provide a gentle warm-up activity for the child. The target areas for this task are:

#### Linguistic Focus

- Word types: nouns (e.g., arm, eyes, ears) and adjectives (e.g., dirty, big–little, broken, colors)
- Morphology: regular and irregular plurals (e.g., arms, feet, teeth), negations (e.g., no, not), question words (e.g., where, what), pronouns (e.g., he, she), and auxiliary verbs (e.g., forms of "do" and "be" and modal auxiliaries such as can and should)

#### Semantic Focus

- Ability to label body parts and early attributes and qualitative concepts (e.g., big–little, colors, dirty, broken)

#### Pragmatic Focus

- Early pragmatic functions: Ability to label objects, comment, get the examiner's or caregiver's attention, make verbal or nonverbal requests, protest, repair and clarify the examiner's utterances
- Ability to answer different kinds of questions and leads by examiners ("wh" questions, "yes-or-no" questions, and examiner's comments)

## Materials

Three bowling pin figures (two big and one little), along with a variety of accessories such as body parts (e.g., arms, feet) and outfits. To add interest, unusual or funny character accessories are included. Some of the necessary parts are mismatched (e.g., doll pants that do not fit), broken (i.e., broken glasses), and dirty (i.e., a set of arms that have been made dirty) to provide multiple opportunities to make comments or request parts. There will also be the opportunity to call attention to parts that are not present (e.g., there are no “cowboy” accessories other than the cowboy hat). Two unusual items (i.e., small ball and small box) are included for Clarifications (see instructions).

## Instructions

To start the task, present the child with two different sizes of bowling pin figures (one big and one small) and prompt the child to answer a question by saying, **“Look what I have here! Which one do you want?”** Repeat the question for shoes/feet while presenting all of the shoes/feet in a bag. Point out the different alternatives (e.g., the bare feet, the different shoes) without describing or labeling them (e.g., **“Look at these!” “Here are some interesting things!”**).

Choose another bowling pin figure and pick up pieces and make comments such as **“Look what I am going to get!”** Without asking questions, wait for the child to say or do something. If the child initially chooses the smaller bowling pin, it is often helpful to set up both of the larger ones because many times the child will change his/her mind later and want the larger one (and as the examiner, you may want the larger one because it has more ease of use for fitting all of the accessories). As you set up the bowling pins, refer to the various figures in whatever manner seems most comfortable for the child (e.g., referring to the bowling pins as a “mommy pin,” “daddy pin,” and “baby pin” or some other description).

Next, hold up the bag of eyes and the bag of arms and ask the child which he/she would like. (Note: if the child chooses eyes first, be sure to present the arms next, and vice versa.) If the child chooses eyes, ask him/her which eyes he/she would like. If the child chooses arms, then take out the set of dirty arms and the set of white arms, and hold one set in each hand. Give the child the set of dirty arms and wait to see if the child makes a comment. Again, point out the different alternatives (e.g., dirty and clean arms) without describing or labeling them (e.g., **“See these?”**). If the child does not respond, say, **“Oh, no. What happened to it?”** If the child still does not respond, make a comment such as **“Oh dear, look at this!”** and give it to the child. If the child does not want it, ask which one he/she would like.

While holding a bag of different props that includes noses, ears, teeth, and mouths, ask the child if he/she wants anything from the bag. Give the child something he/she did not ask for (e.g., if the child asks for ears, give the child a nose). You may repeat this process a couple of times (see how the child indicates those are not what he/she wanted). Make sure the child notices the teeth and ask what they are so that the child can have a chance to label them.

Show the child the broken glasses and say, **“Oh, no! Uh-oh, look at this! Should I put them on yours or mine?”** Note whether or not the child responds by answering the question. Let the child put the glasses on and note if the child comments about them being broken. After the child has had the opportunity to comment on the broken glasses, you may offer the child the intact glasses as well so that he/she can choose to use either pair.

The child should also have choices for a hat. Hold the bag and point out different hats. Again without describing or labeling the items, ask the child which hat he/she would like (e.g., **“Tell me which one you want.”**). Then, make a mistake (while being silly and playful) by putting random pieces (e.g., shoes, eyes, arms) on the top of your bowling pin figure’s head as if it was

a hat and make a comment such as **“What do you think?”** or **“See!”** Wait for the child's response.

If the child does not respond, move the pieces to the correct places and make comments such as **“Oh, this goes here!”** This way, you are giving the child a chance to say, “It's not a hat.” If the child does not respond, you can say, **“Oh no, I thought it was a hat.”**

Next, take out the item of clothing that is too small to fit the figure (e.g., doll pants) and ask the child if he/she can put the item on his/her bowling pin figure. The purpose here is to see if the child uses words like “doesn't fit” in response to your request. After the child has had a chance to explore the doll pants, present the bag of items that includes the rest of the accessories (e.g., purse, butterfly wings).

The bag that contains the other accessories includes two unusual items (e.g., small ball and small box) that do not appear to be a part of the task. While going through the bag that contains the other accessories, make a comment that contains a pseudo-word for clarification: **“Oh no, I cannot find my tusket!”** (“Tusket” is a pseudo-word for a small ball.) Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child's response is not clear or completely effective, repeat the comment once more. If the child still does not ask for clarification, take the object and say, **“Oh, here it is. I found it!”** (See Clarifications.)

After the child has a chance to request several objects in the bag, take out a few more of the props and let the child play with these for a while. Ask the child if something is present that is not there (e.g., **“Are there more things for a cowboy?”** **“Are there any earrings for the mama pin?”**) This is to elicit the use of negation (e.g., “It's not there.” “I don't see it.” “I can't find it.”).

After the bowling pin figures are assembled, ask the child if he/she wants to name them (e.g., **“Let's name them!”**) and take a few minutes, if the child desires, for pretend play. The order of administration during the Play Figure Assembly activity can be flexible. It is recommended that you initially follow this order because experience suggests that it is most efficient, but if the child spontaneously comments or uses a particular target function or form, it is fine for you to follow that lead and then return to other recommended prompts.

At the end of this task, while cleaning up, make a request that contains a pseudo-word for clarification. Ask the child, **“(Child's name), can you give me my pennag?”** (“Pennag” is a pseudo-word for a small box.) Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child's response is not clear or completely effective, repeat the question once more. If the child still does not ask for clarification, take the object and say, **“Oh, here it is. I found it!”** (See Clarifications.) If you miss an opportunity to administer the clarifications during the Play Figure Assembly activity, you can administer these during other activities with a similar setup (e.g., place the unusual objects on a table with other materials).

## ② Clarifications

This task focuses on eliciting the child's requests for clarifications of your comments and questions. To do so, you make two comments to the child and ask him/her two questions during different tasks. These comments and questions contain pseudo (made-up) words that children are not familiar with so that the child has opportunities to request clarifications.

### Linguistic Focus

- Questions: "Wh" questions (e.g., *What* did you say? *What* is "mella?")

### Pragmatic Focus

- Ability to request clarification of examiner's comments and questions containing unfamiliar words

### Materials

This task occurs during **Play Figure Assembly** and **Picture Description**, using materials that are part of those activities. No additional materials are needed.

### Instructions

This task provides an opportunity for the child to request clarifications of your comments and questions that contain unfamiliar words (e.g., pseudo-words such as *tusket* and *pennag*). Basic administration instructions are described here; see Clarifications in the coding section of this manual for additional detail. During Play Figure Assembly, say, "**Oh no, I cannot find my *tusket*!**" ("Tusket" is a pseudo-word for a small ball.) Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child's response is not clear or completely effective (e.g., the child says "What?"), repeat the comment once more. If the child still does not ask for clarification, take the object and say, "**Oh, here it is. I found it!**" At the end of this task, while cleaning up, ask the child, "**(Child's name), can you give me my *pennag*?**" ("Pennag" is a pseudo-word for a small box.) Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child's response is not clear or completely effective, repeat the question once more. If the child still does not ask for clarification, take the object and say, "**Oh, here it is. I found it!**"

If the child has clearly clarified **both** your comment for *tusket* and your question for *pennag*, then the Clarifications task is complete and the second trials (described next; administered during Picture Description) need not be administered. If the child clearly clarified either the comment or the question, then you only need to administer the second trial for the item not yet clarified (i.e., if the comment was clarified, then it is only necessary to administer the second trial for the question and vice versa). If the child has not clearly clarified both your comment and your question for *tusket* and *pennag*, then the second trials for both the comment and question should be administered.

The second trial of Clarifications is administered during the Picture Description activity. Before you present the envelope with a picture inside, say, "**Oh, no! I forgot my *gastron*!**" ("*gastron*" is a pseudo-word for "envelope.") Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child's response is not clear or completely effective, repeat the comment once more. Bring out the envelope after the second prompt (or after the child asks for clarification) and say, "**Oh, here it is. I found it!**" Toward the end of Picture Description, when the child has finished looking at the picture, ask the child, "**Can you hand me the *mella*?**" ("*Mella*" is a pseudo-word for "picture.") Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child's response is not clear or completely effective, repeat

the question once more. If the child still does not ask for clarification, take the picture and say, “Oh, here it is. I found it!”

When the OSEL is administered to the same child on more than one occasion, for example during test–retest reliability research, it is possible that a child may remember the specific nonsense word or context/item from the previous administration (and therefore might not ask for clarification). If there is concern that the child may remember the context, then you should take care to modify the Clarifications task during the repeated administration by using a different nonsense word (i.e., you should make up a similar nonsense word) and by varying the reference item and activity in which the nonsense word is presented (e.g., the Clarifications trials could be presented during the Camping Trip and Where Is It? Game activities, using materials from those tasks). Although these modifications are acceptable, it is still important to maintain the rest of the administration guidelines for Clarifications (e.g., the number of trials presented, the number of repetitions of the prompts).

### **3 Telling a Picture Story**

#### **(Picture Series: *Frog Story*, *Pool Story*, or *Wake Up Brother Story*)**

The picture stories offer an opportunity for the child to demonstrate narrative skills by commenting on main ideas or narrating a sequential story. The child is presented with a story that is depicted in four panels. Because each part of the story is depicted in a panel, the child does not have to make many inferences but can simply describe what is depicted.

Each story starts out with a familiar event and develops into a problem, which remains open-ended. Therefore, the story can be described at multiple levels: (a) What is happening in the here and now, and what people and objects are involved? (b) How does the problem evolve and how do the different characters feel about the situation? (c) The child can make predictions about how the problem may be resolved in the future. (d) The child can relate the story to his/her own experiences. The understanding of each main idea in the story is coded on the OSEL In-Session Coding Form during the administration.

Highest priority targets for this activity are the child's uses of different word and verb forms as well as different sentence structures:

#### **Linguistic Focus**

- Word types: nouns (e.g., people), verbs, adjectives (especially emotions), pronouns (e.g., Is there a package for *me*? / She is sad)
- Verb tenses: regular and irregular past tense, future tense, progressive: What happened? What will happen next? What's happening?
- Sentence structures: complex sentence structures (subordination such as “. . . because . . .” for cause-and-effect relationships; coordination such as “. . . and . . .”)

#### **Semantic Focus**

- Vocabulary in different semantic fields: nouns (e.g., people inside or outside the family, familiar activities such as swimming, eating, sleeping), and adjectives (especially emotional states, as well as colors and qualities of objects depicted)



## Pragmatic Focus

- Is the narrative coherent? (main ideas, cause-and-effect relationships, plausible sequence of events)
- Orientation to the speaker/listener (topic introduction, topic maintenance)
- Spontaneous reports on emotional states of story characters (e.g., happy, mad)
- Ability to ask the examiner questions about both nonpersonal facts and personal experiences

## Materials

Pictures (four panels specific to each story), a board on which the pictures can be attached by Velcro, colored paper, stickers, and an envelope large enough to hold the stories. Any of the three picture story series may be used, with the selection based on the child's interest and age. Care was taken to balance the stories in regard to gender roles, as well as ethnic and cultural backgrounds.

## Instructions

Before the OSEL administration, select the story you feel is most appropriate for the child and place that picture series, along with the colored paper and stickers, into an envelope marked with the child's name. If the child is upset or uninterested in one set of pictures, or unable to describe any scene even with specific prompts (not producing any language sample related to the scene), then you may switch to a different set. When more than one set is presented, you may code language from both sets (see descriptions for each item in the Pragmatic–Semantic Profile for more specific instructions for coding Narrative Skills). No more than two sets should be presented during the administration.

While handing the envelope to the child, say, **“Special delivery! It says (child's name).”** Act surprised and say, **“Who is (child's name)?”** to stimulate either a verbal response (“It's for me”) and/or a nonverbal response (pointing). Let the child take out the stickers and put them on the paper or wherever he/she would like (though not on the testing materials). The colored paper and stickers are included to help motivate the child. After the child takes the pictures out of the envelope, you (the examiner) place the pictures in order on the board. After the pictures are arranged in order, say, **“Look at these pictures. They tell a story. Can you tell me what's happening in the story?”** Lay the board in front of the child, giving whatever prompts are necessary to encourage him/her to begin the story.

General prompts (e.g., “What happened?” “What's happening?” and “What do you think will happen?”) and specific statements or questions (e.g., “I wonder what the frog is doing . . . ,” “Look at what the boy is doing here!” “What's she doing?”) may be necessary to create opportunities for the child to produce verb tenses, to comment on emotional states of the characters involved, to explain cause-and-effect relationships, and so forth. Start with general questions to see if the child spontaneously provides information about the picture story. If the child does not provide enough information, ask specific questions. If the child does not seem to sequence the story presented, even with multiple prompts, you can point out the sequence of the story (e.g., “The story starts from here”) and ask specific questions (e.g., “What's happening in this first picture?” “What happened next?” “And then?”).

## 4 Conversation

Conversations should happen throughout the assessment as opportunities present themselves. If necessary, set up the background by selecting a topic in which you think the child might be interested (e.g., pets, vacations, holidays). This allows the child to initiate conversation about points of interest or experiences and to respond to conversational leads provided by you. The targets for this task are as follows:

### Linguistic Focus

- Any syntactic and morphological structures
- Compare complexity, amount, and length of the child's utterances across communicative contexts with more structure (e.g., one-word responses and yes/no responses versus sentence-length responses)

### Semantics Focus

- Does the child discuss events or objects outside of the immediate context; can he/she maintain a conversation without visual cues?

### Pragmatic Focus

- Number of back-and-forth exchanges (conversational turns)
- Responses to questions: "wh," yes/no, specific, open questions
- Responses to leads
- Initiations of communication
- Is the interaction balanced or dominated by the special interests of the child?

### Materials

No specific materials are necessary.

### Instructions

You may initiate a conversation with the child, or respond to and elaborate on the child's observations and comments, at any time during the assessment. Assess the child's ability to carry on a minimal conversation with back-and-forth exchanges without visual supports and under less structured circumstances. Offer simple comments about the materials and/or related events outside of the testing situation, and then give the child time to reply or make his/her own comments. Offer bids/leads (initiation of a conversation) occasionally to see if the child is able to engage in the interaction (e.g., if the child is playing with the plastic food, you might say, **"I really like one kind of ice cream"**).

When making leads for conversation, it is important to keep in mind the child's interests and developmental level. The conversations should not always focus on a child's circumscribed interests (e.g., child's unusually strong interests in specific topics such as Thomas the Tank Engine or Disney cartoons), but should include age- and/or developmentally appropriate topics. Possible conversational topics may include but are not restricted to pets, vacations, and holidays (e.g., **"I have a dog at home!" "My family went to the beach and saw whales." "I just had a special birthday party too!"**) Also, while making conversation, it is best to use open-ended questions (rather than closed questions) and to avoid questions that can be answered with yes/no or simple answers. "Wh" questions can be used as open-ended questions (e.g., **"What did you do on your trip to Florida?" "What gifts did you get at your birthday party?"**). You will need to ask some yes/no questions during other activities, but these should generally not be used to initiate conversations in order to avoid a question-and-answer-style interaction.

Engage the child in conversation multiple times throughout the assessment to give him/her many opportunities to demonstrate conversational skills. The use of different topics and areas of interest allows the child multiple opportunities for conversation. Only conversations with the examiner (not the caregiver) are considered when coding the number of conversational turns. Conversations with caregivers are not considered because it can be difficult to know how much a caregiver is leading (or has “rehearsed” with the child) the conversations that might be heard.

## **5 Camping Trip**

This activity provides an opportunity to observe the child’s spontaneous language production within a loosely structured pretend-play activity (getting ready for a camping trip or picnic, building a house/tent/castle, etc.) and an exploratory/sensory activity (exploring with a flashlight, fishing on a pretend lake made out of a bubble wrap, etc.) during which the child sometimes has the opportunity to lead. The following linguistic and pragmatic structures are particular targets during this activity:

### **Linguistic Focus**

- Morphological structures: complexity of verb phrases, verb tenses, verb forms
- Sentence structures: all structures are possible, but mostly simple sentences are expected

### **Semantic Focus**

- Vocabulary in different semantic fields (e.g., *nouns*: types of food, household items, camping supplies, etc.; *verbs*: functions of objects, activities during role play, etc.)

### **Pragmatic Focus**

- Reciprocity: number of back-and-forth exchanges (conversational turns)
- Verbal initiation of communication
- Responses to questions, materials, and comments provided by the examiner
- Interaction balanced between both communication partners or dominated by the special interests or particular linguistic strategies of the child

### **Materials**

- **For building the house/tent:** 1 bed sheet and a table large enough for the child to sit under and to drape the bed sheet over to make the tent
- **For (Camping) trip:** Some plastic dishes and utensils (2 plates, 2 cups, 2 forks, 2 spoons, 2 knives), several pieces of play food, camping equipment (pretend matches/matchbox, a candle, some cotton balls, clothespins, a flashlight, a bar of soap, and a short piece of rope), a toy dog, bubble wrap (for a pretend lake), a toy fishing pole, 4 or 5 toy fish, 3 toy geese, 3 toy mice, 5 or 6 pretend leaves, and a backpack

The play materials, consisting of some real objects and some toys, were specifically chosen to address a range of interests and cognitive levels of young children. All camping trip materials should be prepacked into the backpack before the start of the assessment.

### **Instructions**

Begin the activity by asking, “**Have you ever been on a camping trip or a picnic? We are going to have a pretend camping trip/picnic.**” If the child says no, provide a more familiar context (e.g., lunch at the park, going to the beach or a pool). Take the camping trip materials out of the backpack and show the child the various materials. Then, help the child repack the

backpack for the trip. While packing the bag, introduce the toy dog to the child and name it. Make sure to say, **“Our dog loves camping, so we should bring him with us.”** While the child is not looking, make sure that you leave the dog out of the bag and place it far from the table that will be used to build a tent. If the child wants to hug or talk to the dog, that is fine, but then take it back so it can be “left behind.” If a child insists on bringing the dog with him/her, you should leave another object behind instead.

Walk over to the table, lay the sheet over the table, and say, **“Let’s build something with these things. This can be a tent (or a fort, house, castle, etc.) Can you help me?”** After you and the child jointly build the tent, give the child the opportunity to choose the next activity by asking, **“Should we explore or cook our dinner first?”** The following instructions describe the exploring activity, followed by the dinner activity. A similar (but reversed) procedure should be used if the child chooses dinner first.

If the child chooses to explore, take out the bubble wrap and place the plastic fish, geese, mice, and leaves on and around it while saying, **“Look, this is a lake/ocean/river! Look at these!”** Ask the child if he/she wants to fish. Hold onto the fishing pole so that the child has a chance to ask for it. Make some comments or ask the child some general questions about the materials (e.g., **“What do you see?” “Look what’s in the water!”**) to see if the child will label them using irregular plurals (e.g., fish, geese, mice, and leaves). You can label the single object (singular forms), such as **“Oh goodness, I see a goose and a mouse and a leaf, and there are more!”** Do not use the plural form, but point out the additional objects. If a child mislabels one of the irregular plural items (e.g., says “duck” for “goose”), you might wish to probe some more, for example by picking up the goose and saying, **“You know what? I think this is a goose. And look, here are two more!”** (and then see if the child says “geese”). You could also later draw attention to the geese and say something about them (**“Are you trying to get them?” “What are these doing in here?”**) to again see if the child mentions geese. You may want to designate a specific place to put the items after they are caught, such as **“Put it in the bag!”** Then, ask the child to show you and tell you what they have. When prompting is necessary to probe the child’s use of irregular plurals in this context, it works well to use a directive (e.g., **“Tell me what you’ve got!”**) or to make a game out of listing the items (e.g., **“Let’s make a list of the catch of the day!”**) rather than only questioning the child about the items.

After the fishing activity, tell the child that it is time to have dinner. Take out the silverware, plates, and cups, as well as the pretend food. If the child has a hard time getting started, pick up some toys and make some limited use of the objects accompanied by language. The aim is to demonstrate pretend play accompanied by language that is limited in scope. This will allow the child freedom to carry out his or her own ideas and to produce language in the absence of models or prompts. For example, if the pretend food includes an egg, you might say, **“I’m hungry—I’ll cook an egg,”** then put the egg on a plate and stir. Then wait to see what the child says and does. If necessary, gesture toward the remaining toys (e.g., pretend food, toy utensils) and say to the child, **“What do you want to do?”** The pretend food contains at least one item that is commonly referred to with a regular plural (e.g., grapes, peas). At some point during the dinner activity, be sure to call attention to that food item without describing or labeling it (e.g., **“Look what else we have here!”**).

During the dinner or fishing activity, while the child is playing with the toys, look surprised and say, **“Oh, no! What happened to our dog?”** If the child does not respond, look at the dog and pause. Then say, **“Oh, no! He’s not here with us!”** This is a lead for the child to say “We forgot him” or to use other irregular past tenses. If the child still does not respond, bring the dog to the tent and say, **“It’s okay. He’s here now.”** If the child does not use irregular plurals with mice, geese, and leaves during the exploring activity, you may also ask the child to show the dog what he/she has caught for another opportunity for him/her to use irregular plurals.

Toward the end of the camping trip activity, if the child has not had an opportunity to play with the bag of other materials (e.g., candle, flashlight, cotton balls, rope, etc.), bring out the bag and let the child explore and play with the materials.

If the child responds to any of your comments or questions, respond in turn to determine how many back-and-forth exchanges the child can maintain. If the child does not respond, try some other interactive play (up to four attempts if the child does not respond). Use your imagination to think of appropriate ways of producing interactive play and language, and add complexities as appropriate (e.g., by making comments about what is happening). Some examples of interactive play include roasting marshmallows, walking the dog, and making a “bear bag” to tie up leftover food in a tree.

Throughout this task, you should comment, show interest, and encourage the child without readily providing prompts or cues to elicit language production (e.g., do not immediately ask specific questions). For spontaneous language production, it is important to use open-ended questions, such as “**What’s happening now?**” or “**How did this happen?**” or open-ended leads, such as “**Wow, look at this!**” If the child does not respond, then provide more specific questions and cues in order to determine how much support and scaffolding the child needs in order to produce language. Engage the child in conversation such as by asking if he/she would want to go on another camping trip or picnic in the future and what he/she would want to do then.

## **⑥ Where Is It? Game**

This activity is designed to elicit spatial prepositions by giving the child opportunities to verbally communicate locations of objects that are out of reach. Specific targets for this activity are as follows:

### **Linguistic Focus**

- Word types: *prepositions*: e.g., in, on, behind, under, in front of, between, next to (depending on the age of the child).

### **Pragmatic Focus**

- Responses to “wh” questions (especially “where is?”)
- Repair utterances
- Request

### **Materials**

Seven different pieces of doll furniture for three different rooms (Living Room chair, Living Room table with drawers, Living Room lamp; Kitchen stove/oven, Kitchen sink/counter; Dining Room table, Dining Room chair), five small objects, and laminated paper with handprints

### **Instructions**

Set up a “room” or two adjacent “rooms” with the doll furniture provided. Show the child the small objects and ask him/her to choose which one you should hide. The remaining objects can be used later if the child wants to hide a different object. Decide who you are going to hide the objects “from.” This could be a caregiver who is observing or an item from the OSEL materials such as the stuffed dog or a bowling pin figure (with at least the eyes in place). Tell the caregiver to cover his/her eyes (or turn the dog/bowling pin figure away so it can’t see). Then have the child put his/her hands on the handprints. This is to prevent the child from using nonverbal modes to indicate the location of the objects without language (e.g., pointing or getting it and handing it over to you).

Next, introduce the activity by saying, **“We are going to play a ‘where is it?’ game! You are going to tell your mommy (or the dog or bowling pin figure) where things are.”** Then say, **“Ready?”** and place the chosen small object “on” or “in” one of the pieces of doll furniture. After placing the object, ask the child, **“Where is (object)? Tell your mommy (or the dog or bowling pin figure), please.”**

- If the child uses the correct preposition to indicate where the object is, hide the object in another position representing a different preposition. Go through this sequence up to four additional times for five trials total with five different prepositions (the child will get one chance for each of the five prepositions). Only correct prepositions are given credit when coding.
- If the child has a difficult time answering the initial “where is it?” question (i.e., the child does not understand the task), place the object “beside” or “next to” a piece of furniture, then model an answer by using a preposition that may not be as familiar to the child (e.g., “beside” or “next to”) by saying **“The (object) is *beside* the table.”** This modeling should only occur if the child does not appear to understand the task itself. After modeling the more difficult preposition, then try placing the object “in” or “on” a piece of furniture and proceed with the activity. Be sure to change the location for “in” or “on” from the location that was used to initiate the task. If the child uses the correct preposition, then follow the instructions described in the preceding paragraph. If the child uses an incorrect preposition, then follow the instructions described in the next paragraph.
- If the child does not use the correct preposition (either at the initiation of the task or after the modeling of the more difficult preposition), then show the child the object and model correct use of the preposition (e.g., **“It’s *on* the table!”**). Then, proceed with the task by moving on to hiding the object in another position representing a different preposition. Correct prepositions should not be modeled further, regardless of the accuracy of the child’s response. Go through the sequence up to four additional times for five trials total with five different prepositions (the child will get one chance for each of the five prepositions; the child is not given credit for the first preposition used because it was incorrect).

The use of spatial prepositions may occur most often during the Where Is It? Game, but the coding of prepositions is not restricted to this task. Spatial prepositions used spontaneously during other parts of the OSEL administration should be given credit as well. If a child has already received credit for a specific spatial preposition, then that preposition does not need to be included during the Where Is It? Game (e.g., if during Play Figure Assembly the child said, “The hat is on his head,” then “on” would not need to be included during the Where Is It? Game). In this case, it is not necessary to do all five trials of the game (though it is acceptable to still complete five trials, if desired).

## **7 Retelling a Story: Where Are My French Fries?**

This activity provides an opportunity for the child to retell a familiar story and provides a general context to observe theory of mind. The main targets for this task are as follows:

### **Linguistic Focus**

- Questions (e.g., “Where is the ketchup?” “Did you eat all the french fries?”)
- Verb tenses (past and future tense; e.g., “I forgot the ketchup,” “I’ll get the ketchup”)
- Adjectives: especially emotions

### **Pragmatic Focus**

#### **Narrative skills**

- Is the narrative coherent? Main idea reported? Sequence of events plausible? Cause-and-effect relationships and inferences correct?
- Different characters’ feelings, experiences, and thoughts reported

### **Materials**

- Two friend figures
- Pretend french fries, two plastic bowls or plates, ketchup bottle

### **Instructions**

Before starting the task, let the child know that you will be showing and telling a story using the play materials. Then tell the child that after you tell the story he/she will have a chance to use the play materials to show and tell the same story back. The instructions below (embedded within the asterisks) include the words that you should say to tell the story. You should say all words that appear in bold.

*Introduce characters and task: **This is Mark, and this is Betsy. They are friends. I’ll tell you a story about Mark and Betsy. When I’m done, you’ll get to play with all the toys and tell me the story again. Are you ready?** (Show the child the ketchup bottle and put it under the table or on an extra chair. The child should know where the ketchup bottle is.)*

*Tell the story: **Mark says: “Hey, Betsy, let’s go to my house and get some french fries!” “Oh, wow, french fries!” says Betsy, “My favorite food. I love french fries!”***

*Distribute an even number of fries, one on each plate: **Mark says, “These are for you, and these are for me.” “But wait. Where is the ketchup?” asks Betsy.***

***Mark says: “Oh, I’m sorry. I forgot the ketchup. Wait right here and I will get some ketchup from the kitchen.”** (Mark goes under the table where the ketchup is hidden from the child.)*

***Betsy looks at the french fries. “Mmm,” she says, “they smell sooo good. I have to try just one . . . and another one . . . and another one . . .”** (Make the french fries “disappear” from the plates by putting them in your hands or lap or under the table.) **Soon, all the french fries are gone, and then Mark comes back.***

*Ask the child: **What will Mark say to Betsy?***

*Wait for the child to come up with an answer. If the child does not respond, continue with the story again: **Look, Mark comes back and says, “Here is the ketchup. But where are the french fries? Who ate all the french fries?” What does Betsy say?** (If the child doesn’t*

*respond, say*) **Betsy says, “I am sooo sorry!” And Mark says, “It’s okay, we can get more.”**

*Say to the child:* **Here are all the toys. Now can you tell me the story?**

If the child does not start retelling the story, ask what happens first. If he/she does not answer, encourage the child by moving the relevant materials and telling him/her the beginning of the story (e.g., **“Hey Betsy, want to come over to my house?”**). If the child does not continue the story at this point, you should play one of the characters and have the child play the other. While doing this, be sure to pause as much as possible to give the child the opportunity to tell the next event in the sequence.

When administering this task, it is best to memorize the script so that it can be repeated verbatim. Even with this intention, it may be difficult to remember each specific word in the script. It is acceptable for some of the words to not be verbatim as long as all core elements are told as a story and are presented in order. For instance, Mark and Betsy [other names are acceptable] get french fries. One of them goes away to get a ketchup bottle. The other one eats all the french fries. The one who went away to get a ketchup bottle comes back and sees that the french fries are gone and asks the other one where the fries are. The one who has eaten up the fries apologizes and the other one accepts the apology. They decide to get more french fries.

## **8 Picture Description**

### **(Single Picture: Balloon Vignette or Painting Vignette)**

Each of the picture vignettes illustrates a surprising open-ended situation and thus provides opportunities to describe objects, people, and events at multiple levels. Before the administration, you choose the vignette that you believe will be of most interest to the child. The situation depicted may not be completely familiar to the child but may relate in some way to the child’s experiences (e.g., a child loses a balloon, or a paint bucket falls over accidentally). Older children may try to problem-solve and talk about what caused the problem depicted or how the problem situation may be resolved. Younger children, who might not fully understand the situation, may still be able to label objects, people, and some of the relationships shown. It should be noted that each picture contains some details that are not relevant to the event depicted, but which are put in as distracters in order to assess whether the child is able to prioritize and focus on the story plot. Note, however, that the child would not get penalized for pointing out the distracters as long as the story plot is coherently reported (e.g., main ideas, sequence of story, cause-and-effect relationships). (Examples of distracters include the bird in the balloon vignette and the boy playing with the paint in the painting vignette.)

The event illustrated in the picture could be described at various levels: (a) The child may describe objects, people, and what the people are doing in the present time depicted in the picture (main ideas, sequence of story). (b) After analyzing the situation, the child can describe the problem and infer how it may have been caused (cause-effect relationships). (c) The child may predict what might happen next or how the problem might be solved. (d) In addition, the child can express an opinion about the relationship of the story to his/her own life.



Target forms and structures are:

### Linguistic Focus

- Word types: nouns (people involved [e.g., mom, dad, a boy]), verbs, adjectives (especially emotions), pronouns (e.g., the package is for *me*?)
- Verb tense/forms: regular and irregular past tense (what happened), future tense (what will happen next?), and auxiliary verbs (e.g., forms of “do” and “be” and modal auxiliaries such as can and should)
- Responses to “wh” questions (e.g., *Who* is the package for? For me!)
- Complex sentence structures (e.g., subordination [“. . . because . . .,” “first . . . then”])

### Semantic Focus

- Vocabulary in different semantic fields: nouns (e.g., people inside or outside the family), activities, and adjectives (especially different emotions depicted)

### Pragmatic Focus

- Is the narrative coherent? (main idea reported? cause-and-effect relationships and inferences correct? plausible sequence of events?)
- Orientation to the speaker/listener (topic introduction, topic maintenance)

### Materials

Either of the two picture vignettes may be used depending on the child’s interest and age. The chosen picture, colored paper, and a couple of stickers are placed in an envelope with the child’s name on it. The materials are set up in this way to help motivate the child. If the child is not interested in the first picture or is distressed by it, the second picture may be used.

### Instructions

Before the OSEL administration, select the picture you feel is most appropriate for the child and place that picture, along with the colored paper and stickers, into an envelope marked with the child’s name. Before presenting the envelope to the child (if the second trial of Clarifications is being administered), say, **“Oh, no! I forgot my *gastron*!”** (“Gastron” is a pseudo-word for “envelope.”) Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child’s response is not clear or completely effective, repeat the comment once more. Bring out the envelope after the second prompt (or after the child asks for clarification) and say, **“Oh, here it is. I found it!”** (See Clarifications.)

As in Telling a Picture Story, the envelope with the pictures should be presented as a special delivery to the child. While handing the envelope to the child, say, **“Special delivery! It says (child’s name).”** Act surprised and say, **“Who is (child’s name)?”** to stimulate either a verbal response (“It’s for me”) and/or a nonverbal response (pointing). Let the child take out the stickers and put them on the paper or wherever he/she would like (though not on the testing materials). The colored paper and stickers are included to help motivate the child.

After the child takes out the picture, say, **“Let’s look at this picture. Tell me what’s happening.”** If the child does not respond, begin telling the story and ask the child to continue.

Special examples or prompts may be necessary to give the child opportunities to produce past and future tenses. For example, say, **“Oh dear, the boy is in trouble. What happened?”** and later, **“Tell me what will happen next!”** to elicit verb tenses. If the child does not comment on people’s thoughts and feelings, you may say, **“Uh-oh, he’s/she’s in trouble.”** Then wait. If the

child does not respond, repeat the press and then say, “**He/she doesn’t look very happy?**” to give the child an opportunity to elaborate.

As in Telling a Picture Story, if a child is upset or uninterested in one of the pictures or unable to describe any elements of the picture even with specific prompts (not producing any language sample related to the vignette), then you should take out the other picture and try to engage the child. When more than one picture is presented, you should code language from both vignettes. (See descriptions for each item in the Pragmatic–Semantic Profile for more specific instructions for coding Narrative Skills.)

Toward the end of Picture Description, when the child is done looking at the picture (and if the second trial of Clarifications is being administered), ask the child, “**Can you hand me the *mella*?**” (“Mella” is a pseudo-word for “picture.”) Wait to see if the child asks for clarification. If the child does not ask for clarification, or if the child’s response is not clear or completely effective, repeat the question once more. If the child still does not ask for clarification, take the picture and say, “**Oh, here it is. I found it!**” (See Clarifications.)

## Ending the OSEL

After completing the last activity, you should indicate the ending of the assessment by saying something like “**We’re all done!**” Coding for the OSEL should end after you have officially indicated the ending of the assessment in this way. No language should be coded after this official ending, regardless of the amount of language the child might display. For example, saying goodbye should not be coded as part of the OSEL. This is important in order to ensure that each administration of the OSEL provides each child with roughly the same opportunities for language.

## Scoring Guidelines

When administering the OSEL, it is important to attend to semantic, pragmatic, and grammatical aspects of the child’s language. While grammatical structures and some pragmatic and semantic aspects are coded *during* the administration (using the In-Session Coding Form), additional pragmatic and semantic skills and other aspects of quality of language use are coded immediately *after* the administration (using the Pragmatic–Semantic Profile). To ease the challenges of note taking and coding during the administration, you can take a brief break at any time if the child can be engaged with materials or with his/her caregiver, and code the language samples up to that point. If you decide to take a break, you should not code language that occurs during the break.

As described in “Specific Administration Guidelines,” you must note an official beginning and ending of the OSEL administration. The official beginning coincides with the introduction of the first OSEL task, and the official ending occurs just after completing the last OSEL task. Only language that occurs after the official beginning and before the official ending is coded during the OSEL. No language may be coded prior to or after these points, regardless of the amount of language the child might display. For example, language that may occur while saying hello and goodbye is not coded as part of the OSEL. This is important to ensure that each administration of the OSEL provides each child with roughly the same opportunities for language.

All portions of the OSEL must be coded based on the live administration. While audio or video recordings may be useful when you are training to use the instrument, the OSEL coding should always be based on your notes from the live administration, not from a review of an audio or video recording. This is important because live coding is likely to produce results somewhat different from audio or video coding.

## Coding Guidelines for the In-Session Coding Form

See the prescored OSEL In-Session Coding Form that accompanies the first training video (OSEL Training Example Case) for an example of a completed form. This coding form for live (in-session) coding is designed to facilitate language sampling and language coding. It is separated into different sections by color and by folds of paper. To begin the administration, fold out the left flap and keep the right flap folded in (see picture document for an example). Folding out the left flap reveals most of the items that will need to be coded throughout the administration. The right flap is used for writing language samples, and the live coding of the language samples is completed on the left part of the form. As the session continues, you will need to fold the left flap back in in order to code certain items (e.g., main ideas for the picture task) and the right flap out in order to provide more space for writing language samples (see picture document for an example). There is space on the back of the form for writing language samples as well. It is also acceptable to use additional blank sheets of paper for writing language samples if that is preferred.

Throughout the administration, all items should be coded based on the spontaneous language that a child produces during the 30- to 45-minute session. At the end of the administration, you should review the language sample and check your coding for accuracy and completeness. The final codes are then transferred to a Summary Coding Table after administration of the OSEL.

“Ceilings” for different items are identified so that if a child uses a certain number of examples for a particular item (e.g., regular past tense; “What?” questions), he/she is considered to “have acquired” the flexible use of that item. Grammatical uses for each item are usually counted up to three or four. These ceilings are set so that you can move your attention to other items.

Most items on the In-Session Coding Form include small boxes that can be used for language coding. The number of boxes matches the number of times an item is being tracked for coding. For ease of use, the boxes are generally formatted in groups of 5 (though some sections will have fewer than 5 boxes, and the Conversation section uses groups of 8).

When coding language, the correct use of each item should be indicated with either the symbol “/” or “X” in a box to the right of each item. When the first box is filled in, the other boxes next to the first one can be used. When subitems are listed under each item (e.g., *A/An/The* and *This/That/These/Those* under Articles/Demonstrative Adjectives), the use of each word or subitem is coded by slashing or checking the box(es) next to or underneath it.

Examples denoted by “Ex:” are also provided under some of the items, followed by a list of possible exemplars. The utterances coded for these items are not restricted to the examples provided on the coding form. For example, for the “Adjectives” item, you should code any adjectives uttered by the child (e.g., “old,” “round”) regardless of whether the adjective appears in the list of examples. These examples are listed because they are commonly heard during the OSEL administration.

The same utterance or word root should be coded only once when instances of different words are recorded. For example, “walk,” “walked,” and “walking” only count as one verb (root = walk), though each version may be counted within its respective category (e.g., present progressive, regular past). In other items, as specified, the same word (e.g., “I”) is counted more than once if it is used in different combinations (e.g., “I like it,” “Can I have it?” “I want the big one”).

Different aspects of the same utterance can be coded for multiple items. For example, the utterance “*Can I use the fishing pole?*” can be coded for “Child Asks Questions – Y/N,” “Pronouns – Subject – I,” “Articles – A/An/The,” “Verbs (for the word *use*),” “Adjectives (for the word *fishing*),” and “Nouns (for the word *pole*).” This utterance can be also coded for Item 1(a) on the Pragmatic–Semantic Profile, “Verbal requests to get needs met,” under Section A, “Communication Functions.” Later in the session, if the child repeats the question again, this

should not be coded again because it was coded already. However, if the child asks “*Can you hand me the flashlight?*” the utterance can be coded as another example of “Child Asks Questions – Y/N,” “Pronouns – Subject – You,” “Pronouns – Object – Me,” “Articles – A/An/The,” “Verbs (for the word *hand*),” and “Nouns (for the word *flashlight*).” This additional utterance can be also coded for Item 1(a) on the Pragmatic–Semantic Profile, “Verbal requests to get needs met,” under Section A. Auxiliaries used in question form should be not coded.

When coding words that commonly can be said together, such as “fishing pole” and “camping trip,” it is acceptable to code the individual elements the first time the child says them spontaneously (e.g., “fishing” and “camping” can be counted as adjectives in “fishing pole” and “camping trip”). However, you must pay close attention to whether the child’s utterance is an imitation of your language. In other words, if you say “fishing pole” or “camping trip” first, then “fishing” and “camping” should not be counted as spontaneously produced adjectives when the child repeats the phrases “fishing pole” or “camping trip.” The words “french fries” should generally not be coded for individual elements because it is not likely the words are being used separately. Some clinical judgment may be needed when determining whether a child is imitating or using the word in a more generative fashion.

Phrases that are conventionally said as units or “chunks” (e.g., “thank you,” “excuse me,” “I don’t know,” “here you go”) should not be coded (either as a whole chunk or as individual elements), because it is not likely that the individual elements are being used in a generative fashion. However, these same words could be coded if they were combined with other words and used generatively to make a unique language structure. For example, although the chunk “I don’t know” should not be coded on its own, the phrase “I don’t know how to put it on” should be coded for all individual elements including the use of “I don’t know.” Similarly, although the chunk “thank you” should not be coded on its own, the phrase “Thank you for handing that to me” should be coded for all individual elements including the use of “thank you.” Some clinical judgment may be necessary when determining if a child is using words together as chunks in a routine way versus using those same words in a more generative fashion. Words that are said while singing a song (e.g., singing the “Happy Birthday” song) should not be coded as spontaneous language. Although chunked phrases and words used during singing are not coded, it may still be useful to document them as part of the language sample.

While common language structures elicited in each task are listed on the coding form, not all of the unusual usages of language are specified under each code. If such language occurs, the verbalization should be noted by writing the phrase in the “Language Sample” section and marking the relevant box under Unusual Use of Language (e.g., “Stereotyped,” “Immediate echolalia”).

At times, it may be difficult to understand a child’s speech. When a child’s speech is clearly unintelligible, it will not be possible to code the language structure. When a child has some unintelligible speech mixed with clear speech, you will need to determine whether some parts of the speech are clear enough to code. When it is difficult to make a decision about how to code unintelligible speech, then it is not clear enough to code and should not be coded. Some clinical judgment will be necessary when coding speech that is not fully intelligible. For example, if a child says “~help~now?” then you could code “help” as a verb; however, you would not be able to code this utterance as a question asked by the child, because the specific type of question is unclear (e.g., it is not possible to determine if the child’s intention was to say “Can you help now?” as a yes/no question, “You help now?” as an intonation question, “Now?” as a one-word question, or something else).

When completing the In-Session Coding Form, it is important to write legibly and to provide as thorough a language sample as possible. Although not all language forms are coded during the OSEL, it is still important to document all utterances in the language sample section of the coding

form. This does not mean that every single utterance must be written down, as some utterances will be repeated and others can be fully captured by circling and marking the appropriate sections of the form. Writing down a thorough language sample is essential, and will be most challenging for older children, who will have a lot of language and may reach ceilings for all of the coding categories. Some of these children may reach ceilings for certain items early in the testing session. For these children, you may stop writing down all utterances at the point at which you are certain that there has been enough language to reach ceilings for all coding categories on the In-Session Coding Form. At that point, you would only write down notable utterances and utterances relevant to coding the Pragmatic–Semantic Profile (e.g., Conversation).

See below for specific explanations of each code included in the OSEL In-Session Coding Form.

### **1. Articles/Demonstrative Adjectives**

Articles/Demonstrative Adjectives are coded based on two different subtypes (*a/an/the*, *this/that/these/those*). Each subtype is coded up to 3 times by slashing or checking the boxes next to it. For example, if a child uses *a*, *an*, and *the*, then you can stop coding the particular subtype since the child has reached the ceiling. This also applies when the child uses the same article *a*, *an*, or *the* in three different utterances (e.g., “I want *the* ear.” “Can you pass me *the* pizza?” “Where is *the* dog?”). When the child reaches the ceilings (3) for both subtypes, you can stop coding articles, which are only coded up to a total ceiling of 6. When coding demonstrative adjectives, it will be important to distinguish them from subject and object pronouns (which are also coded during the OSEL). A demonstrative adjective precedes and describes a noun (e.g., “*That* hat is mine,” “I want *that* hat”), whereas a subject or object pronoun replaces a noun (e.g., “*That* is mine,” “I want *that*”).

### **2. Adjectives**

Up to 16 *different* adjectives are coded during the OSEL administration. Common examples of adjectives are listed on the coding form (e.g., *big*, *dirty*, *yucky*). Adjectives describing emotions are also counted under this item (e.g., *happy*, *worried*) as well as marked under the Emotions and Mental States section of the form. If a child uses multiple adjectives for color (e.g., *blue* shoes, *green* hat), only two examples are coded. Similarly, if a child uses multiple adjectives for number (e.g., *one* arm, *two* ears), only two examples are coded. If a child uses multiple adjectives of other types (e.g., multiple emotion words such as *happy*, *sad*, and *worried*), each adjective can be counted separately. When coding, you should check or slash each box once for each adjective that will be counted. In addition, you should circle each adjective that was used (if the adjective is provided in the list of examples), or write down the adjective in the writing space (if the adjective is not in the list of examples).

### **3. Nouns**

Up to 16 *different* nouns are coded throughout the OSEL administration. Common examples of nouns are listed on the coding form (e.g., *feet*, *arm(s)*, *mouth*). As with adjectives, code the specific nouns by checking or slashing the boxes as well as by circling the noun that was used (if the noun is provided in the list of examples) or using the writing space to write in the child’s utterance. Among these nouns, certain types of nouns are coded again under Regular Plurals, Irregular Plurals, and Gerund (see descriptions below). For example, if the child uses the noun *arms*, then *arms* is coded twice—once under Nouns and once under Regular Plurals. When both singular and plural forms of the same word are used (e.g., *arm* and *arms*), then only one of the forms should be counted into the general noun category (e.g., either count *arm* as a noun and *arms* as a regular plural, OR count *arms* as both noun and regular plural).

### *Regular Plurals*

Up to 6 *different* regular plurals are coded throughout the OSEL. Several common examples of regular plurals are listed on the coding form (e.g., *arms, ears, eyes, hands, hats, noses, shoes*).

### *Irregular Plurals*

Up to 4 *different* irregular plurals are coded throughout the OSEL. Several examples of irregular plurals are listed on the coding form (e.g., *feet, fish, geese, mice*).

### *Gerund (verb+ing)*

Up to 2 *different* gerunds are coded throughout the OSEL. The type of gerund coded in the OSEL is a verb+ing form that serves in place of a noun (e.g., *Swimming* is fun, I like *going* to a park, Let's go *fishing*). Gerunds may be coded when used within sentences that are not grammatical sentences, so long as the gerund use itself is grammatical (e.g., "Let's go more fishing" receives credit for the gerund "fishing" because it is a grammatical use of the gerund even though the "more" is inserted in the wrong place; "Let's do eating" does not receive credit because the unit "do eating" is not a grammatical use of a gerund).

## **4. Pronouns**

Three different classes of pronouns (Subject, Object, and Possessive) are coded separately in the OSEL. Errors for Subject and Possessive Pronouns are also coded (e.g., *I-you* and *he-she* confusions for subject pronouns; *my-your* and *his-her* confusions for possessive pronouns). Mark the coding form by slashing or checking the box for each class of pronouns and error types.

### *Subject Pronouns*

Subject pronouns are coded based on 6 different subtypes (*I, you, it, he/she, we/they, one/ones/this/that/those/these*). Each subtype is coded up to 3 times. For example, if a child uses *he* or *she* on three different occasions (e.g., *She* is crying, *He* is jumping in the water, *He* made her cry), then you can stop coding the particular subtype because the child has reached the ceiling. This also applies when the child uses the same subject pronoun *I* in three different utterances (e.g., "*I* want the nose," "*I* love fishing," "*I* need the flashlight"). When the child reaches ceilings (3) for all subtypes, you can stop coding subject pronouns that are coded up to a total ceiling of 18.

*Errors for subject pronouns* are coded based on 2 different subtypes (*I/you/we* and *he/she/they*). Each error subtype is coded up to 3 times, up to a total ceiling of 6. For example, if a child uses *I* to mean *you* or *we* (e.g., "*I* want one?" [to mean "*You* want one?"]); uses *you* to mean *I* or *we* (e.g., "*You* are thirsty" [to mean "*I* am thirsty"]); or uses *we* to mean *I* or *you* (e.g., "*We* need to go" [to mean "*I* need to go"]) on three different occasions, then you can stop coding that subtype because the child has reached the ceiling. Examples of the other subtype include using *he* to mean *she* or *they* (e.g., "*He* is crying" [to mean "*She* is crying"]), using *she* to mean *he* or *they* (e.g., "*She* is jumping" [to mean "*They* are jumping"]), and using *they* to mean *he* or *she* (e.g., "*They* are climbing" [to mean "*He* is climbing"]). Errors are also included when other pronouns are substituted for the target pronoun (e.g., "It's happy" [to mean "*She's* happy"]; "*Him* needs shoes" [to mean "*He* needs shoes"]).

### *Object Pronouns*

Object pronouns are coded based on 5 different subtypes (*me, you, it, him/her/ them/us, one/ones/this/that/those/these*). Consistent with subject pronouns, each subtype is coded up to 3 times, with a total of 15. Examples include "Give it to *her*," "I got *it*," and "This is for *you*."

### *Possessive Pronouns*

Possessive pronouns are coded based on 4 different subtypes (my/mine, your/yours, our/ours, his/her/hers/their/theirs). Consistent with other two pronouns, each subtype is coded up to 3 times, with a total of 12. Examples include “Here is *my* bowling pin,” “Put it on *yours*,” and “That’s *his* balloon.”

*Errors for possessive pronouns* are coded based on 2 different subtypes (my/mine/your/yours and his/her/hers). Each error subtype is coded up to 3 times, up to a total ceiling of 6. For example, if a child uses *his* to mean *hers* (or vice versa) (e.g., “These are *his* shoes” [to mean “These are *her* shoes”]) and uses *mine* to mean *yours* (or vice versa) (e.g., “This cup is *mine*” [to mean “This cup is *yours*”]) on three different occasions each, then you can stop coding errors for possessive pronouns because the child has reached the ceiling. Errors are also included when other pronouns are substituted for the target pronoun.

## **5. Spatial Prepositions**

Up to five *different* spatial prepositions are coded throughout the OSEL administration. The uses of prepositions may occur most often during the Where Is It? Game, but the coding is not restricted to this activity. Examples are listed on the coding form (e.g., the ball is *on* the table, and the glove is *under* the bed). In order to receive credit, the spatial preposition must be used accurately (e.g., use of the spatial preposition *on* to mean *under* does not receive credit).

## **6. Child Asks Questions**

Throughout the OSEL administration, the child is presented with opportunities to ask various kinds of questions. The questions coded here should have words ordered correctly in question form but can have some word omissions or grammatical errors such as errors in plurals (e.g., “Where is the geese?”), subject–verb agreement errors (e.g., “What is they doing?”), pronoun errors and word omissions (e.g., “What her do?” [instead of “What is she doing?” or “What does she do?”]), or morphological errors (e.g., “What happen?”). A total of six different types of questions (described below) are coded by slashing or checking the relevant boxes. With the exception of the One Word category, questions must have more than one word to be counted (e.g., the one-word question “Why?” would count in the One Word category but not in the Why/How category).

### *Who/Where/When*

Up to three *different* questions containing Who/Where/When are coded. Examples include “Who are you going to be?” “Where is a fishing pole?” “When are we going to have dinner?” This also applies to the child using three different “where” questions (or three “who” or “when” questions) such as “Where is the shoe?” “Where are we going for camping?” and “Where do you live?”

### *What/Which/How About*

Up to three *different* questions containing What/Which/How About are coded. Examples include “What are these?” “Which one do you want?” “How about we go exploring first?” This also applies to the child using three different “what” questions (or “which” or “how about” questions) such as “What is that?” “What do you want to eat?” and “What are we going to do?”

### *Why/How*

Up to three *different* questions containing Why/How are coded. Examples include “Why are mice in the lake?” “How does this work?” This also applies to the child using three different “why” questions (or “how” questions) such as “Why is she crying?” “Why is the ball in the bag?” and “Why did I get a package?”

#### *Yes/No (Y/N)*

Up to three *different* yes/no questions are coded. Examples include “Do you want the pizza?” “Is this a candle?”

#### *One Word*

Up to three *different* one-word questions are coded. Examples include “What?” “Me?” “Here?” “Now?”

#### *Intonation Only*

Up to three *different* sentences or phrases that do not have words ordered in question form but display rising intonation (indicating a question) are coded. Examples include “I can try?” “He is not here with us?” “A bird?” “That one?”

### **7. Longest Utterance and Longest Conversational Turn**

#### *Longest Utterance*

Throughout the administration, you should monitor the length of the child's utterances, and write down several examples of long utterances. Among these utterances, the longest one is chosen and the number of words included in the utterance is coded up to 8. The form includes a space to write the length of the longest utterance. Note that words that are said as one unit, such as “french fries,” would only count as one word when counting the number of words in an utterance (e.g., “I like french fries” would be considered a 3-word utterance).

#### *Longest Conversational Turn*

Throughout the administration, you should create several opportunities to have back-and-forth conversations with the child. The conversational turns during these episodes should be monitored, and the longest turns are coded up to 8 turns. You can open the conversation but the last turn coded should be of the child closing, rather than the examiner. When you open the conversation, a total of 8 turns should include at least 4 turns by the child, as in the following: (1) examiner opens, (2) child responds, (3) examiner, (4) child, (5) examiner, (6) child, (7) examiner, (8) child continues to build or closes conversation. When the child opens, a total of 8 turns should include at least 4 turns by the child and the child attending to your final comment, as in the following: (1) child opens, (2) examiner responds, (3) child, (4) examiner, (5) child, (6) examiner, (7) child, (8) examiner (the child must attend to the examiner's comment but does not need to respond).

A similar method is used for determining shorter conversational turns. For example, here is how 3 conversational turns might occur: (1) examiner opens, (2) child responds, (3) examiner responds (child attends to the examiner's comment but does not respond further) OR (1) child opens, (2) examiner responds, (3) child continues to build (examiner does not respond) or child closes conversation.

The coding form includes four sets of eight boxes to help tally conversational turns and a space in which to write the length of the longest conversational turn. Although only four sets of eight boxes have been included on the form, you may need to track more than four conversation attempts depending on the specific administration. In addition to coding the number of conversational turns, it is important to attend to other aspects of the child's conversation as well, such as the flow and ease of the conversation, reciprocity, and flexibility to discuss a variety of conversational topics. These other aspects are coded after the administration using the Pragmatic–Semantic Profile. As noted earlier, conversations with the caregiver should not be included when coding conversational turns.



## 8. Verbs

Nine verb categories are included on the OSEL coding form: Verbs (referring to general verbs), Regular Past, Irregular Past, Copula, Auxiliaries, Progressive, Future, Infinitive Phrases, and Wh/How + Infinitive. In addition, one error category (Subject+Verb Agreement Errors) is included in this section.

Up to 16 *different* general Verbs are coded throughout the OSEL administration. Similar to adjectives and nouns, the examiner codes the specific verbs by checking or slashing the boxes as well as by circling examples or using the writing space to write in the child's utterance. Among these verbs, certain types are coded again under Regular Past, Irregular Past, Copula, Progressive, Infinitive Phrases, and Wh/How + Infinitive (see descriptions below). For example, if the child uses the verb *going* (as in "I am *going* to a toy store"), then *going* is coded twice—once under Verbs and once under Progressive. When the child uses different forms of the same verb (e.g., *go*, *going*, and *went*), then only one of the forms should be counted into the general Verbs category (either *go*, *going*, or *went*), although the forms should be further coded into additional categories (e.g., *going* should further be coded under Progressive, *went* should further be coded under Irregular Past).

Similarly, one use of a copula (*am*, *is*, *are*, *was/were*) can be counted into both the Copula category and the general Verbs category (to represent the verb *to be*). For example, in "I *am* happy," the *am* would be counted as a copula and as a general verb (form of *to be*). Subsequent uses of the other copula verbs are only coded into the Copula category and not the general Verbs category. For example, if after saying "I *am* happy" the child said "He *is* sad," then the *is* would be counted into the Copula category because it is a different form of the copula, but would not be counted as an additional verb because it is from the same word root (*to be*). A special case arises when considering coding for the copula "was/were," because these verbs are also irregular past verbs. However, the copula form of "was/were" does not receive credit under the Irregular Past category, because that would essentially be triple-coding the utterance. Therefore, the coding for "was/were" is accounted for in the Copula and general Verb categories only.

Other types of verbs are coded during the OSEL as well, including Auxiliaries and Future (see descriptions below). These two specific categories are not counted into the general Verbs category. For example, in the phrase "She can go there," *can* is counted into the Auxiliaries category, but not as a general verb (*go* would be counted as the general verb for this phrase). Note that the verb *do* might count into either the general Verbs or Auxiliaries category depending on its use. *Do* counts as a general verb when it stands on its own (e.g., "I am *doing* homework") and as an auxiliary when used with other verbs (e.g., "I *do* know what you mean"). Similarly, various forms of the verb *to be* (*am*, *is*, *are*, *was/were*) might count into either the Copula (and general Verbs) or Auxiliaries category depending on their use. When these forms are used as a stand-alone verb (e.g., "I *am* happy" or "He *is* sad"), then they are counted into the Copula category (and one use of a copula verb is also counted into the general Verbs category, as described previously). In contrast, when these forms are used with other verbs (e.g., "I *am* going to the toy store"), then they are counted into the Auxiliaries category (in this example, the *am* is counted into the Auxiliaries category, but not as a general verb; *going* would be counted as the general verb for this phrase, as well as a progressive, as described earlier).

Regarding future verbs, use of the verb *will* is counted as both a future and an auxiliary. For example, in the phrase "He will help her," *will* is counted as both a future and an auxiliary (*help* is counted as the general verb in this sentence). The forms *would*, *won't*, and *wouldn't* get counted as auxiliaries, but are not included in the Future category. Note that the words *going to* might count into either the Future or other verb categories, depending on their usage. In the phrase "He is going to help her," *going to* is counted into

the Future category (and *help* is counted into the general Verbs category). In contrast, in the phrase “I am going to a toy store,” *going* gets counted into the Verbs and Progressive categories, as described earlier.

In addition to coding verbs, subject–verb agreement errors are coded up to 3 times.

#### *Regular Past*

Up to 6 *different* regular past verbs (ending with -ed) are coded. The examples include used, jumped, cried, and climbed.

#### *Irregular Past*

Up to 4 *different* irregular past verbs are coded. Common examples are listed on the coding form (e.g., did, forgot, went, got, had, put, took).

#### *Copula*

Four subtypes of copula verbs (am, is, are, was/were) are coded once each. Contracted copulas are also included in this coding (e.g., I’m, he’s, we’re). To be counted as a copula, these forms must be used in a stand-alone fashion. When used with another verb, then these forms are included in the Auxiliaries category, described next.

#### *Auxiliaries*

Up to six subtypes of auxiliary verbs are coded only once among *do/does/did/don’t/doesn’t/didn’t*, *can/can’t/could/couldn’t*, *may/might*, *shall/should/shouldn’t*, *will/would/won’t/wouldn’t*, and *am/is/are/was/were*. A verb is considered an auxiliary verb when used in conjunction with other verbs. The use of auxiliaries in questions is not coded (e.g., “Can I have this?” “Should I put this in here?”).

#### *Progressive*

Up to 3 *different* present progressive verbs (ending with -ing) are coded. The examples include *going* and *doing*.

#### *Future*

Up to 2 subtypes of future verbs are coded up to twice among *going to/gonna* and *will*. The contracted form of *will* is also included in this coding (e.g., *I’ll*, *he’ll*, *we’ll*). Note that only the form *will* is counted for this category; *won’t* is not included because it is usually used to indicate refusal or unwillingness rather than what is actually going to happen in the future.

#### *Infinitive Phrases*

Up to 4 *different* infinitive phrases (in the form of *to + verb*) are coded. Examples include *to do*, *to go*, and *to eat*.

#### *Wh/How + Infinitives*

Up to 2 *different* wh-/how + infinitive phrases are coded. Examples include *how to do* and *where to go*. Language falling in this category does not get double-coded into the Infinitive Phrase category. For example, in the phrase “I don’t know how to do that,” the “how to do” is coded as Wh/How + Infinitive and the “do” is coded as a verb; the “to do” is not coded separately. Note that a child might reach the ceiling for Wh/How + Infinitives before reaching the ceiling for Infinitive Phrases. In this case, it is acceptable to code such use as an Infinitive Phrase. For example, if the child had already reached the ceiling for Wh/How + Infinitive when he/she said “I don’t know how to do that,” then the use of “to do” could be coded as an example of an infinitive phrase.

### *Subject–Verb Agreement Errors (S+V Agreement Errors)*

Up to 3 incidents of subject–verb agreement errors are coded throughout the OSEL. Common examples include third-person subject incorrectly connected with singular versus plural verbs (e.g., “They *is* eating,” “She *am* pretty”).

## **9. Negation**

Up to three *different* uses of negation are coded. Common examples of negation are listed on the coding form (e.g., “No way!” “I’ve *never* climbed a tree before,” “She *is not* happy”).

Negations in the form of contractions can be coded for only 2 of the 3 possible uses (e.g., *n’t* is coded up to twice if the child says “I can’t do it” on one occasion and “I don’t want it” on another occasion; if the child later says “It won’t fit,” then this third statement cannot be coded for negation because it is a third contraction). Contractions that are forms of the same word should only be counted once. For example, the use of *didn’t*, *don’t*, and *doesn’t* can only be counted as one contraction, because they are all forms of the same word, *do*. For example, if the child says “I don’t want it,” “It doesn’t fit,” and “He didn’t do it,” then only one contraction (either *don’t*, *doesn’t*, or *didn’t*) is counted for negation. The same is true for other contractions that are forms of the same word, such as *can’t/couldn’t* and *won’t/wouldn’t*.

Negative contractions can be counted in both the Auxiliaries and Negation categories, but only once per word root. For example, if a child says “didn’t,” then *didn’t* is coded into both the Auxiliaries and Negation categories. However, you would not count “didn’t” into the Auxiliaries category if *did* had previously been coded as such (because that word root would have already been coded). *Didn’t/Doesn’t/Don’t* all count as the same negative contraction and the same auxiliary because they are not separate word roots.

Use of the word “not” is only counted as a negation in the noncontracted form. For example, if the child says “didn’t,” then the contraction “didn’t” is coded for negation (and as an auxiliary); you cannot code “not” separately for negation when coding “didn’t.”

## **10. Types of Negation**

Three *different* types of functions that are served by negations are coded up to three times each: Refusal/Protest, Absence/Refutation, and All Done/Finished. Refusal/Protest is when the child uses negation words to refuse an offer to refuse to perform certain acts, or to protest following directions (e.g., “I don’t want the arm”; “I don’t want to do it”; saying “no” when asked to retell the story). Absence/Refutation is when the child uses negation words to indicate that something is missing/absent (e.g., “There is no arm in this bag”) or to indicate that something is wrong or false (e.g., “It’s not working”; “That’s not feet”; “This is not for her”). All Done/Finished is when the child uses negation words to indicate that he or she is all done or finished with certain tasks (e.g., “No more picture”). Note that use of the words “all done” or “finished” (e.g., the child saying “I’m all done” or “Finished!”) do not count into the All Done/Finished category, because those words themselves are not negation words.

Although only 3 unique negations need to be tracked for coding the Negation category itself, you must additionally track all uses of negation until the ceilings are met for Types of Negation. In contrast to coding for Negation itself, all negation words—not just unique uses—are considered each time they are used for tracking Types of Negation. For example, if a child uses the negation words *no*, *never*, *no*, *not*, *didn’t*, and *no*, then only 3 unique utterances are coded into the Negation category (e.g., *no*, *never*, and *not*), but the function of all 6 utterances is considered when coding Types of Negation (i.e., *never*, *not*, *didn’t*, and 3 uses of *no*). Types of Negation are tracked up to a ceiling of 9, with a ceiling of 3 in each of the 3 function categories (Refusal/Protest, Absence/Refutation, All Done/Finished).

## 11. Sentence Forms

Six different sentence forms (Noun+Noun, Noun+Verb, Conjunction, Coordination, Subordination, and Imperative) are coded throughout the OSEL. Noun+Noun and Noun+Verb forms are only coded for children who are not yet using complex sentence forms. Therefore, if a child is using conjunction, coordination, and/or subordination forms (at least one instance of any one of these forms), Noun+Noun and Noun+Verb should be considered automatically as passed and therefore are not coded.

The same sentence can be coded into more than one of the categories described below. For example, if the child says, "I like milk and my sister likes cookies and chocolate," then the sentence gets coded for both coordination (for the first "and") and conjunction (for the second "and"). Similarly, if the child says, "Let's go camping and I think will make S'mores," then the sentence gets coded for imperative, coordination, and subordination.

### *Noun+Noun (N+N)*

Up to 2 *different* uses of phrases that consist of noun plus noun are coded (e.g., "mama milk," "fish lake"). These forms are common in children who are primarily using two-word phrases.

### *Noun+Verb (N+V)*

Up to 2 *different* uses of phrases that consist of noun plus verb are coded (e.g., "baby drink," "mommy eat"). Similar to the N+N forms, these forms are also common in children who are primarily using two-word phrases.

### *Conjunction*

A total of 2 *different* conjunctions (and, or) are coded only once for each. These words should connect nouns (e.g., milk *and* cookie, water *or* juice) rather than phrases (e.g., "I like milk *and* my sister likes cookie"). In the latter case, these utterances are coded under *Coordination*.

### *Coordination*

A total of 4 *different* sentences with coordination (independent clauses connected with words such as *and*, *or*, *but*) can be coded. Examples include: "Our family went camping *and* my dad made a tent." "We can go explore *or* we can make a campfire." "I am scared of mice *but* my brother is not."

### *Subordination*

A total of 4 *different* subordination sentences (dependent clauses connected to independent clauses or dependent clauses embedded within sentences with words such as *because*, *if/then*, *while*, *what*, *when*). Examples include: "I love to go camping *because* I can sleep in a tent." "*If* the paint spills on her, she is going to cry." "*While* she was looking for a ketchup bottle, he ate all the fries." "I don't know *what* you want to eat." "*When* I go camping, I will make S'Mores."

### *Imperative*

Up to 4 *different* imperative sentences (sentences that the child uses to give a command to you or direct your behavior) are coded. Examples include: "Let's explore first!" and "Give it to me."

## 12. Unusual Use of Language

This section of the coding form helps you keep track of pragmatic and semantic skills that are coded after the administration using the Pragmatic–Semantic Profile. Throughout the administration, various aspects of unusual use of language are coded including examples of interrupting the examiner, use of stereotyped utterances (e.g., a child repeating lines from Sesame Street), nonspecific words (e.g., I want that *thing*, I need the *stuff*!) or making semantic errors (e.g., Those are flowers [for leaves]), immediate echolalia (e.g., when you say "See these?" the child repeats after you immediately by saying "See

these?”), and use of rude or socially inappropriate words or phrases (e.g., child saying “shut up” or using swear or toilet words). Interrupting the examiner is coded in Section B of the Pragmatic–Semantic Profile; other unusual aspects are coded in Section D of the Pragmatic–Semantic Profile.

The In-Session Coding Form includes space to track up to 5 *different* examples for each of these aspects. The number of boxes for each item (5) is provided for convenience and is not intended to map directly onto the coding for the Pragmatic–Semantic Profile. It may be necessary to track more than 5 examples for a given item depending on the language of the child being tested. When considering how to code this information on the Pragmatic–Semantic Profile, you will need to consider the child’s overall amount of language, frequency of unusual language, and the extent to which unusual language interferes with communication.

When a phrase is identified as immediate echolalia, it should not be coded for individual elements because it is not spontaneous language (i.e., the child is repeating you). Similarly, if a child uses stereotyped language that is out of context and clearly a repetition of language heard elsewhere (e.g., the child repeats a phrase from a cartoon), those phrases should not be coded for individual elements. Some clinical judgment will be necessary when determining whether to code stereotyped language use for individual elements, however. For example, if a child uses language in a functionally appropriate but stereotyped/repetitive way (e.g., always saying “I do it” with the same odd intonation as a request for a turn), then that language should be coded for individual elements the first time it is used.

### **13. Telling a Picture Story**

This section of the coding form helps you keep track of pragmatic and semantic skills that are coded after the administration using the Pragmatic–Semantic Profile. In each administration, one story from Telling a Picture Story (either the Pool, Frog, or Wake Up Brother picture series) is used. Complete the portion of the coding form that corresponds to the picture presented. (In the event that more than one Picture Story was presented, you should complete this portion for each story that was presented.) Key story elements (main ideas) for each picture are included on the form. Up to 3 of the main ideas are coded for each story. Circle each key element of the story when the child spontaneously reports them without specific probes. If the child reports these ideas only when specific probes are provided, then those reported ideas can be underlined instead of circled. Any labeling of emotions that occurs during this activity should be coded under the Emotions and Mental States section of the form (which appears just below the Telling a Picture Story and Picture Description sections). It is also important to attend to the child’s sequencing abilities and ability to report cause-and-effect information.

Main ideas for the Pool story are the boy jumping into the water, the water splashing, and the water getting on the girl. Main ideas for the Frog story are the frog jumping, the frog landing in the food, and the frog being taken out of the food. Main ideas for the Wake Up Brother story are the mother trying to wake up her son, the sister drumming, and the boy waking up.

When coding main ideas, it is important to remember that the main ideas for a story are different than the implied relationships between characters. In other words, if a child misunderstands an implied relationship (e.g., calling the sister a “girl” or a “friend” instead of a “sister” in the Wake Up Brother story), but otherwise reports the main elements correctly (e.g., says that the friend drums to wake up the boy), then credit should still be given for the main ideas.

#### **14. Picture Description**

This section of the coding form helps you keep track of pragmatic and semantic skills that are coded after the administration using the Pragmatic–Semantic Profile. In each administration, one vignette from Picture Description (either the balloon or painting vignette) is used. Complete the portion of the coding form that corresponds to the picture presented. (In the event that more than one picture vignette was presented, you should complete this portion for each vignette that was presented.) Key story elements (main ideas) for each picture are included on the form. Up to 3 of the main ideas are coded for each story. Circle each key element of the story when the child spontaneously reports them without specific probes. If the child reports these ideas only when specific probes are provided, then those reported ideas can be underlined instead of circled. Any labeling of emotions that occurs during this activity should be coded under the Emotions and Mental States section of the form (which appears just below the Picture Description section). It is also important to attend to the child's sequencing abilities and ability to report cause-and-effect information.

Main ideas for the balloon vignette are the child in the tree, the balloon stuck in the tree, and the parents helping. Main ideas for the painting vignette are the paint that has spilled, the footprints of paint, and the paint about to spill on the girl. As with Telling a Picture Story, credit should be given for correct reporting of main elements even if implied relationships between characters are misunderstood (e.g., calling the parents “adults” instead of “parents”).

#### **15. Emotions and Mental States**

This section of the coding form helps you keep track of any emotion words and mental state terms that are used during the administration. Specifically, code the child's use of words (commonly adjectives) describing emotional (e.g., happy, angry, guilty, worried) and mental (e.g., confused, surprised) states of others. These words commonly occur during the Telling a Picture Story and Picture Description tasks, but the coding of these words is not limited to these tasks. Common examples of emotional and mental states are included on the form, and you can also write in any additional relevant words that the child uses. Only one example of each emotion word or mental state term needs to be coded (e.g., if the child uses the emotion word “happy” five times, “happy” should only be coded one time). It will also be useful to note any comments on facial expressions (e.g., crying, smiling) or actions related to emotional states (e.g., running away, hiding), as well as any incorrect identification of emotional or mental states (e.g., using the word “sad” to describe a character who is angry). When recording emotion words, you should also note whether the utterance was spontaneous or probed (e.g., by circling or underlining), as this distinction will need to be considered when coding the Pragmatic–Semantic Profile. Although emotion words and mental state terms are coded after the administration as part of the Pragmatic–Semantic Profile, they will need to be coded on the In-Session Coding Form as well. For example, when these words are used as adjectives, they should additionally be coded into the Adjectives category; the same is true for verbs (e.g., “thinking”).

#### **16. Retelling a Story: Where Are My French Fries?**

This section of the coding form helps you keep track of pragmatic and semantic skills that are coded after the administration using the Pragmatic–Semantic Profile. In each administration, the child is asked to retell a story during the Retelling a Story: Where Are My French Fries? activity. Three key story elements (main ideas) for the retelling of the story are included on the form. Circle each key element of the story when the child spontaneously reports them without specific probes. If the child reports these ideas only when specific probes are provided, then those reported ideas can be underlined instead

of circled. Any labeling of emotions that occurs during this activity should be coded under the Emotions and Mental States section of the form (which appears just above the Retelling a Story section). It is also important to attend to the child's sequencing abilities and ability to report cause-and-effect information.

Main ideas for the French Fries story are Mark leaving to get ketchup, Betsy eating the french fries, and Mark asking about what happened to the french fries (e.g., "Where are the french fries?"). As with Telling a Picture Story and Picture Description, credit should be given for correct reporting of main elements even if implied relationships between characters are misunderstood. This is also the case if the characters themselves are fully reversed in the retelling of the story (e.g., if the characters of Mark and Betsy are switched, such that the child says that Betsy leaves to get ketchup, Mark eats the french fries, and Betsy asks what happened to the french fries).

## **17. Clarifications**

This section of the coding form helps you keep track of several pragmatic and semantic skills coded as part of the Pragmatic–Semantic Profile. Specifically, code the child's clarification attempts in response to your use of pseudo (made-up) words as part of comments and questions (see Clarifications in the administration section for more details). The first set of attempts (one comment and one question each containing a made-up word) is presented during Play Figure Assembly. Each prompt is presented up to two times to allow the child a chance for clarification. The child's attempt to clarify what you said (e.g., "What did you say?" "What is that?") is then coded (see next paragraph for how to mark the child's responses on the record form). If the child does not effectively clarify a comment and/or a question, the second trial of one comment and one question (using different made-up words) is made during the Picture Description task. Again, each prompt is presented up to two times to allow the child a chance for clarification, and the child's response is coded.

### *Marking the child's responses for Clarification items*

The Clarifications section of the In-Session Coding Form includes the required prompts and space to code the child's responses to the prompts for Play Figure Assembly (and Picture Description, if necessary). As seen on the form, the first Clarification prompt of a comment is presented during Play Figure Assembly. Two boxes are provided for recording the child's response, because the prompt can be presented up to two times. If the child effectively clarifies your comment on the first prompt (e.g., "What is gastron?"), a plus (+) sign is entered in the first box and the comment portion of Clarifications is considered complete. If the child does not clarify your comment (e.g., no response), a minus (–) sign is entered in the first box and you present the same prompt again. If the child effectively clarifies the prompt after the second presentation, a plus (+) sign is entered in the second box and the comment portion of Clarifications is considered complete. If the child does not clarify the prompt after the second presentation, a minus (–) sign is entered in the second box and Trial 2 of Clarifications (a new prompt for a comment, presented during Picture Description) must be administered later in the session. A similar process for marking the coding form is followed for the prompt of a question during Play Figure Assembly, and for any additional prompts that must be presented during Picture Description. The Clarifications section of the coding form also includes space next to each set of boxes for writing in the child's response. In addition to marking the boxes, you should write in the child's words (or actions) used for clarification. (Alternatively, you could write down the child's responses in the Language Sample section of the form.) Writing down the child's responses is important since the effectiveness of the child's response (e.g., an attempt that is not entirely clear versus a clear attempt) is given differing credit in the Pragmatic–Semantic Profile. When the child's response is not fully effective or entirely clear (e.g., the child says "What?" or "Huh?" or hands

you an object with nonverbal communication indicating confusion), then you should use a question mark (?) in the box to indicate that the response was unclear. You then continue with the prompts/trials as you would if the child had not clarified the response. That is, an unclear response is allowed as many additional trials as a nonresponse is allowed.

#### **18. Child's Response to Examiner's Questions/Leads**

Throughout the OSEL administration, you ask various questions to the child including Wh- and Yes/No (Y/N) questions. You also present conversational leads for the child to follow (e.g., you might say "I went camping a few weeks ago and had so much fun!"). Up to 3 correct responses and 3 incorrect responses or nonresponses for each of these questions and leads are coded. An incorrect response is one in which the child provides incorrect information, such as if you ask, "What are these?" (referring to feet) and the child replies, "Arms." (Note that this response would also be considered when coding the item "Unspecific language and/or semantic errors" in Section D of the Pragmatic–Semantic Profile.) An example of an incorrect response to a conversational lead would be if you said, "I went camping a few weeks ago and had so much fun!" and the child responded by saying, "How old are you?" A nonresponse is one in which the child does not respond at all, either verbally or nonverbally (e.g., child does not say anything or nod/shake head or point). Incorrect responses and nonresponses are not differentiated in the coding categories. The child's responses should be coded when opportunities present themselves until the ceilings are reached. You should be careful not to ask too many questions in order to reach the ceilings (ideally, you should ask a total of 3 questions each in each category).

As with coding child questions, grammatically incorrect answers to examiner questions are given credit as responses. For example, if you ask "What are these?" and the child provides a grammatically incorrect response such as "gooses" or "mouses," you should give credit for answering the question correctly (though, in this example, no credit would be given for the plural form).

Some clinical judgment will be necessary when determining incorrect responses. For example, if you ask "What are these?" (referring to the geese) and the child replies "Swans," the child could be given credit for answering the question correctly, with the child's reply also coded as a noun and a regular plural (just not the irregular plural that you tried to elicit). The reason "swans" could count as a correct response for Child's Response to Examiner's Questions/Leads is that swans and geese look very similar, so it is not clear that "swans" is a word-finding deficit. Alternatively, if there is evidence that a child makes semantic mistakes frequently (substituting one word for another, such as apple for orange and tape for sticker), you may make a clinical judgment that "swans" is an incorrect answer to a question due to a word-finding deficit. If this is the only response that contains a semantic mistake, there is not enough evidence of a word-finding deficit, and the response "swans" should be counted as a correct response to a question. The geese in particular are sometimes referred to by other bird terms (e.g., duck), so it is best if you do not use "What are these?" (referring to geese) as one of the three test questions, given the possibility of an unclear response.



## Syntax Coding Examples

I want the blue eyes.  
(sub pro) (verb) (article) (adjective) (reg plural)  
(noun)

Can I put the glasses on my pin?  
[\*] (sub pro) (verb) (article) (reg plural) (preposition) (pos pro) (noun)

(Y/N question asked by child) [\*Note: Use of Auxiliary in a question form is not coded.]

I see a lot of fish in the lake!  
(sub pro) (verb) (a lot of) (irreg plural) (preposition) (article) (noun)

Swimming is fun.  
(gerund) (copula v) (adjective)  
(noun) (verb)

She is crying because he splashed the water on her.  
(sub pro) (auxiliary) (progressive v) (verb) (sub pro) (reg past v) (article) (noun) (preposition) (obj pro)

(subordination sentence)

The boy is stuck in the tree and the parents  
(article) (noun) (copula v) (adjective) (preposition) (article) (noun) (and) (article) (reg plural)  
(verb) (noun) (noun)

are trying to help him.  
(auxiliary) (progressive v) (infinitive phrase) (obj pro)  
(verb) (verb)

(coordination sentence)

I will cook an egg and sausages, and you  
(sub pro) (future v) (verb) (article) (noun) (conjunction) (reg plural) (and) (sub pro)  
(noun) (noun)

should start the fire.  
(auxiliary) (verb) (article) (noun)

(coordination sentence) (imperative sentence)

I don't know how to cook dinner.  
(sub pro) (auxiliary) (verb) (how infinitive) (noun)  
(negation) (verb)

(subordination sentence) (Absence/Refutation Type of Negation)

I'm going to eat.  
(sub pro) (future v)  
(auxiliary) (infinitive phrase)  
(verb)

## Demonstrative Adjectives and Pronoun Examples

That	hat	is	cute.
(demonstrative adj)	(noun)	(copula v)	(adjective)

That	is	mine.
(sub pro)	(copula v)	(pos pro)

I	want	that.
(sub pro)	(verb)	(obj pro)

I	want	that	hat.
(sub pro)	(verb)	(demonstrative adj)	(noun)

These	ones	are	mine.
(demonstrative adj)	(sub pro)	(copula v)	(pos pro)

## Subject–Verb Agreement Error Examples

There **is** many trees. (There **are** many trees.)

They **was** happy. (They **were** happy.)

There **is** geese on the lake. (There **are** geese on the lake. In this sentence, *geese* is the subject.)

## Coding Guidelines for Pragmatic–Semantic Profile

Most of the pragmatic and semantic skills are scored after the administration using the Pragmatic–Semantic Profile. The coding of the Pragmatic–Semantic Profile is based on the quantity and quality of language observed during the OSEL administration. This profile codes skills related to Communication Functions (e.g., frequency and coordination of verbal and nonverbal requests to get needs met, child asking for or offering personal or nonpersonal information), Orientation to the Speaker (e.g., conversational skills, interrupting, clarification), Narrative Skills (e.g., reporting main ideas, sequencing, and cause-and-effect relationships, commenting on emotions or mental states), and Semantic and Unusual Aspects of Language (e.g., stereotyped language, unspecific language, immediate echolalia, impolite language, speech abnormalities, and speech intelligibility).

The Pragmatic–Semantic Profile includes detailed descriptions for each specific code. The following general rating descriptions apply to this profile:

**Code 0** when there is no evidence of the abnormality specified.

**Code 1** when the behavior is mildly abnormal or slightly unusual and does not interfere with the child's participation in the activities.

**Code 2** when the behavior is clearly abnormal but does not necessarily interfere with the child's participation in the activities.

**Code 3** when the behavior specified is markedly abnormal or completely absent, and/or interferes with the child's participation in the activities.

For all the ratings, scores range from 0 to 3 (0 for appropriate performance and 3 for most abnormal). A rating of 8 may be used for any item that is not applicable if not specified otherwise. When coding the Pragmatic–Semantic Profile, you should refer to the In-Session Coding Form and identify the examples of relevant codes in the Pragmatic–Semantic Profile.

To complete the Pragmatic–Semantic Profile form, first review the summary paragraph and specific coding criteria (keeping in mind the general coding criteria described in the OSEL Administration and Coding Manual as well). Then, choose the code that most accurately reflects the child's language use during the OSEL administration. Write the chosen code in the box that appears to the left of each item.

### Guidelines for Completing the Summary Coding Table

The Summary Coding Table is used to summarize the results of the In-Session Coding Form. The design of the Summary Coding Table parallels the design of the coding form, with the first page representing the one coding column on the outside of the form, and the second page representing the two coding columns from the inside of the form. To complete the Summary Coding Table, simply transfer the information (count, sum of count, etc.) for each code from the In-Session Coding Form to the Summary Coding Table. Some examples of how to complete the Summary Coding Table are as follows:

**Example 1: Telling a Picture Story and Picture Description.** The child stated 3 main ideas (2 spontaneous/circled, 1 probed/underlined) for the frog story and 1 main idea (probed/underlined) for the painting vignette. In this example, on the Frog row you would write the number 2 for spontaneous and the number 1 for probed, and on the Painting row you would write the number 0 for spontaneous and the number 1 for probed. The rows for Pool, Wake Up, and Balloon could either be left blank or marked N/A. The sections for Emotions and Mental States and Retelling a Story can be completed in a similar fashion.

**Example 2: Clarifications.** Mark the child's response for each prompt of each trial. Consider the following child's responses to the Clarifications activity: Trial 1 Comment was not clarified for the first prompt, unclear for the second prompt; Trial 1 Question was clarified for the first prompt; Trial 2 Comment was clarified for the first prompt. To mark the Clarifications section of the Summary Coding Table for this child, you would mark (–) in the first column of the Trial 1: Comment row, (?) in the second column of the Trial 1: Comment row, (+) in the first column of the Trial 1: Question row, and a (+) in the first column of the Trial 2: Comment row. The remaining boxes (the second column of Trial 1: Question, the second column of Trial 2: Comment and both columns of Trial 2: Question) could be left blank or marked N/A.

**Example 3: Articles/Demonstrative Adjectives.** The child's language resulted in the In-Session Coding Form being marked with 2 uses of A/An/The and 3 uses of This/That/These/Those. In this example, you would complete this section the Summary Coding Table by writing the number 5 in the Articles (3)/Demonstrative Adjectives (3) row, the number 2 in the A/An/The (3) row, and the number 3 in the This/That/These/Those (3) row.

### Organization of Research Forms

For convenience, the research forms have been organized so that the Summary Coding Table and Pragmatic–Semantic Profile are combined in one booklet. The first two pages of the booklet are the Summary Coding Table, and the remaining pages are the Pragmatic–Semantic Profile. Therefore, for each child tested, you will need to turn in two forms, one form that is completed *during* the administration (the In-Session Coding Form), and one form that is completed *immediately after* the administration (which includes both the Summary Coding Table and Pragmatic–Semantic Profile).

Be sure to write the Site ID, Child (Examinee) ID, Examiner ID (if applicable; for sites with multiple examiners), and Date of Testing where indicated on both the In-Session Coding Form and the combined Summary Coding Table/Pragmatic–Semantic Profile.