Terms Used in Talking about Language Development

Scientists who study language development look at:

Communication *(Pragmatics)*
The way language is used in social situations (Taking turns talking, eye contact, body language, tone of voice).

Vocabulary *(Semantics)*
The meaning of words, phrases, and sentences.

Sentences *(Syntax)*
The order of words and phrases that form sentences.

Sounds *(Phonology)*
The pattern of speech sounds that make up the articulation rules of a language.
Typical Age: 0-8 mos.

Perlocutionary stage – Stage before the baby has ideas to communicate to others; adults act as if babies are communicating; this is how they learn to communicate!

Mom talks to baby as if she is communicating, even at 2-3 months old

Typical communication 0-3 months

Typical behavior at 6 months

Communication (Pragmatics)

What to look for:

- Follows a moving person with his/her eyes
- Smiles when he/she hears a voice or sees another smile
- Gets excited when caregiver approaches
- Cries differently when tired, hungry or in pain
- Startles in response to a loud sound
- While lying on his/her back, will follow a moving object with eyes
- Orient to sound (i.e. looks toward the source of a sound)

If children not have had opportunities to interact with objects and toys, or have disorders such as blindness, deafness or cerebral palsy, they may have delays. Also, understanding words in English may be delayed if the child is not learning English at home.

Sounds (Phonology)

<table>
<thead>
<tr>
<th>0 to 2 months:</th>
<th>2 to 4 months:</th>
<th>3 to 6 months:</th>
<th>6 to 8 months:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Makes sounds, but productions are not speech like: gurgles, burps, coughs Begins blowing bubbles</td>
<td>Coos Produces vowel-like sounds</td>
<td>Makes sounds that are not quite speech-like; Marginal babbling emerges (not quite like syllables in speech yet)</td>
<td>True babbling emerges – consonant- vowel combinations, may be repeated (e.g. “da”, “muh”, or “ba-ba-ba”)</td>
</tr>
</tbody>
</table>

• Early sounds

Cooing video

Sound development examples: 4-6 months

Canonical Babbling video
**Typical Age: 8-12 mos.**

**Illocutionary stage** – expresses his/her thoughts with gestures and sounds; including requesting objects and actions, refusing, commenting, engaging in communicative games with gestures, sounds and looking.

**Typical 9 month behavior**

**Communication (Pragmatics)**

- Shouts or coughs to attract attention
- Protests by pushing undesired objects away
- Waves goodbye
- Participates in pat-a-cake and peek-a-boo
- Changes behavior in response to the emotional reactions of others
- Imitates sounds or actions

**Vocabulary (Semantics)**

Understands 3 to 50 words

- Begins to connect words to objects
- Turns head in response to hearing his/her name
- Understands simple commands
  - Example video of early understanding
- Gestures and/or vocalizes to indicate his/her wants and need
  - Example gesture/vocalization video

**Sounds (Phonology)**

- Jargon babble emerges – not repetitive pattern, but changes and combinations of sounds; has melody of the home language (e.g. “do-ba-di”)
  - Example jargon babble
- Vocalizes when playing alone and to a mirror
- Common speech sounds produced: /m/, /b/, /y/, /n/, /w/, /d/, /p/, /h/
- Most babbling is made up of syllables with just one consonant and one vowel (/ba/, /mi/, or /nana/)
Typical Age: 12-18 mos.

**Locutionary stage** – same ideas expressed before with sounds and gestures are now expressed with words.

**Typical 12 month behavior**

**Communication (Pragmatics)**
- Frequency of communication acts: five in one minute of free play
- Asks for attention with sounds (possibly with a word)
- Requests objects by pointing, vocalizing, or using words
- Protests by saying no, shaking his/her head, or moving away
- Calls attention to things by pointing, showing, giving, combined with looking at adult.
- Answers simple wh- questions with a vocal response or pointing gesture

**Vocabulary (Semantics)**

Average spoken vocabulary size: 50-100 words at 18 mo
- Words are understood outside of routine games
  - Understanding words example video
- Points to familiar or desired objects
- Follows simple one-step commands
  - Example one-step commands video
- First true words are spoken
  - Example first words video

Semantic roles (ideas) expressed in one-word speech include:

<table>
<thead>
<tr>
<th>Agent (“Mommy”)</th>
<th>Possession (“Mine”)</th>
<th>Denial (“No”)</th>
<th>Can answer the question “What’s this?”</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action (“go”)</td>
<td>Rejection (“No”)</td>
<td>Nonexistence (“all gone”)</td>
<td>Asks for “more”</td>
</tr>
<tr>
<td>Object (“balloon”)</td>
<td>Disappearance (“All-gone”)</td>
<td>Location (“chair”)</td>
<td>Says “hi,” “bye”</td>
</tr>
</tbody>
</table>

**Sounds (Phonology)**
- About half of what the child says is understood by adults in the family
- Common mistakes include repeating the same syllable for a two syllable word (e.g. “wawa” for “water”), leaving out a weak syllable (e.g. “nana” for “banana”), making two sounds in a word more alike (“goggie” for “doggie”), saying only one sound in a blend (“pay” for “play”), and leaving off the last sound in a word (e.g. “be” for “bed”).
- Example video conversation with one year old
Typical Age: 18-24 mos.

Babies begin combining words.

*Typical 18 month behavior*

**Communication (Pragmatics)**

- Frequency of communicative acts: 7-8/minute of free play
- Frequency of word use increases
- Says “What’s that” to get attention
- Uses single word or two-word phrases to request, claim possession, express ideas and problems
- Names objects
- Lots of verbal turn-taking

**Vocabulary (Semantics)**

- Average spoken vocabulary of 200 to 300 words by 24 months
- Understands single words for objects out of sight
- Says own name on request
- Responds to yes/no questions

Semantic relations understood and spoken by putting two words together include:

<table>
<thead>
<tr>
<th>Agent-action (Mommy go)</th>
<th>Agent-object (Mommy car)</th>
<th>Action-object (drive car)</th>
<th>Description-item (Silly mommy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item-location (Shoe chair)</td>
<td>Action-location. (Sit chair)</td>
<td>Possessor-possession. (My dolly)</td>
<td>Demonstrative-entity. (That puppy)</td>
</tr>
</tbody>
</table>

**Sentences (Syntax)**

Two-word ‘sentences’ emerge

[Example two-word utterance video](#)

**Sounds (Phonology)**

By 24 months, 9 to 10 beginning and 5 to 6 ending sounds used in words

Words with consonant sounds at both the beginning and end (“bed”) are used

Two-syllable words (e.g., “puppy”) emerge

[Example 18 mo. speech](#)
New kinds of communication include make-believe play, talking about objects that can’t be seen, and misrepresenting reality (i.e., lying and teasing).

**Typical behavior at 24 months**

**Typical speech at 24 months**

### Communication (Pragmatics)

- Uses attention-getting words like “hey” to attract attention
- Uses “please” to make polite requests
- Expresses emotion
- Clarifies messages in response to a request to do so
- Takes part in short conversations
- Introduces and changes topics in conversation
- Narratives (i.e. stories) are mostly labels and descriptions
- “Stories” are sequences of unrelated ideas
- “Stories have themes (are about something) but no plot"

### Vocabulary (Semantics)

- Understands and uses questions about objects, people and basic events
- Uses and understands “why” questions
- Understands and uses basic location terms (in, on, under, etc.)
- Follows a series of two related commands
- Has concept of “one” and “all”
- Knows concept of “big” and “little”
- Asks simple “who”, “why”, “where”, “how many” questions
- Answers “where” and “what doing” questions

### Sentences (Syntax)

- Understands 1st person (”I”) and 2nd person (“You”) pronouns; 3rd person “He”, “She”/pronouns are emerging
- Regular past tense (-ed) is used; irregular past tense (went, came) is emerging
- “Overgeneralized” past tense forms appear – “I swammed” for “I swam”
- Articles “a” and “the” appear
- Adverbs of location appear (e.g. “here”)
- Uses “be” verbs inconsistently (e.g. “I am happy”)
- Use “is” plus an adjective (“He is big!”)
- Contracted form of “is” appears (e.g. “he’s big”)
- Emerging use of “-ing”, “in”, “on”, and plural
- Present tense helping verbs appear (e.g. “I can help”);
  “Semi- auxiliaries” gonna, wanna gotta and hafta are used to make longer sentences.
- Superlative “-est” is used (e.g. “biggest”)
Typical Age: 30-36 mos.

Language grows from phrases to full sentences.

Typical language at 30 months
More typical language at 30 months

Communication (Pragmatics)
- Repairs errors and misunderstandings; corrects others
- Adds more fillers to acknowledge a partner’s message (e.g. “uh-huh” and “okay”)
- Uses language for fantasies, jokes, and teasing

Vocabulary (Semantics)
- Can answer “what if” questions
- Asks “how”, “why”, “when” questions
  - Example questions video
- Asks for detailed explanations

Sentences (Syntax)
- Past tense helping verbs appear (could, would, should)
- Be verbs used inconsistently
- Overgeneralized past-tense forms are still common (goed, comed)

Sounds (Phonology)
- Awareness of and ability to produce and recognize rhymes emerges
- Produces most sounds correctly, but not all
- Understood most of the time by most people
Typical Age: 36-42 mos.

Typical three-year old behavior

Communication (Pragmatics)

- More flexible in requesting, including the following:
  - Permission directives (Can I...?)
  - Indirect request (Could you...?)
  - Direct request decreases in frequency, as indirect requests increase (Is it OK if I have a cookie?)
- Participates in longer conversations
- Can tell stories that are simple with a major theme and some organization of events in time
  - Typical three year old story

Vocabulary (Semantics)

- Understands basic color and shape words
- Uses and understands basic kinship words (aunt, uncle, cousin, grandmother, etc.)

Sounds (Phonology)

Makes a few mistakes on sound production but can be understood 75% of the time.
Typical Age: 42-48 mos.

Typical 4 year old behavior

Communication (Pragmatics)

New kinds of communication include reporting on past events, reasoning, predicting, expressing empathy, creating imaginary roles and props, and maintaining conversations

Typical 4 year old story

Vocabulary (Semantics)

- Uses and understand “when” and “how” questions
- Uses and understands basic size vocabulary (big, small, tall, short)
- Uses conjunctions “and” and “because” to connect ideas in sentences (I like ice cream because it tastes good.)

Sentences (Syntax)

- Uses complex sentence types, including:
  - Full prepositional clauses
    - I know that the cat is naughty.
  - Wh- clauses
    - I went where the other kids were playing.
  - Simple infinitives
    - I want to play.
  - Conjoined sentences
    - I am tired and I want to sleep.

Sounds (Phonology)

- Child can produce consonant blends (play); some sound errors are made, but speech is close to 100% understandable.
Typical Age: 48-60 mos.

**Typical five year old behavior**

**Communication (Pragmatics)**
- Correctly uses deictic terms (those express the perspective of the speaker)
  - Here / These
  - That / This
  - Come / Go
  - Bring / Take
- Ability to self-correct when misunderstood increases
- Can tell stories that are a sequences of events; stories may have some plot but NO central character or resolution (clear ending).
  - Typical five-year old story

**Vocabulary (Semantics)**
- Knowledge of numbers and counting emerges
- Knows the concepts of “between”, “above”, “below”, “top” and “bottom”
- Uses conjunctions “when”, “so”, “because” and “if”
- Asks for the meanings of words

**Sentences (Syntax)**
- Later-developing complex sentences emerge, including:
  - Relative clauses (e.g. “My friend who lives down the street is coming over”)
  - Infinitive clauses (e.g. “I want him to go”)
  - Gerund clauses (e.g. “Swimming is fun”)
  - Wh-infinitive clauses (e.g. “I don’t know where to put it”)
- Uses past tense helping verbs in negative sentences (e.g. *I couldn’t go*)
- All basic sentence forms are used correctly

**Sounds (Phonology)**
- Speech is 100% understandable; only a few speech sound errors
- Can divide words into syllables

Kindergarten readiness skills
### Helpful Videos on Typical Development

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Video Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8 mos.</td>
<td></td>
</tr>
<tr>
<td>8-12 mos.</td>
<td></td>
</tr>
</tbody>
</table>
| 18-24 mos.| **Development at 1 year**  
            **Language at 1 year** |
| 24-30 mos.|             |
| 30-36 mos.| **Language at 30-36 months**  
            **Development at 36-42 months** |
| 42-48 mos.|             |
| 48-60 mos.|             |
What behaviors that I observe in my child are “red flags,” or signals to seek an evaluation?

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Behaviors</th>
<th>Examples videos on Developmental Delays</th>
</tr>
</thead>
<tbody>
<tr>
<td>0-8 mos.</td>
<td>Delayed head control, rolling over, sitting up</td>
<td>Red flags: 0-4 mos.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Red flags: 5-7 months.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Delays in developmental milestones</td>
</tr>
<tr>
<td>8-12 mos.</td>
<td>Lack of social engagement and attention to speech</td>
<td>Recognizing early speech delay</td>
</tr>
<tr>
<td>12-18 mos.</td>
<td>No words; no gestures and sounds to communicate</td>
<td>Developmental milestones: 12-15 months.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Red flags for development; 12-18 months</td>
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<tr>
<td></td>
<td></td>
<td>Early communication development</td>
</tr>
<tr>
<td>18-24 mos.</td>
<td>Few words; little interest in others; doesn’t respond to name</td>
<td>Developmental milestones: 18-24 months</td>
</tr>
<tr>
<td>24-30 mos.</td>
<td>Few words; no word combinations</td>
<td>Red flags for development in 2 year olds</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Red flags for speech development in 2 year olds</td>
</tr>
<tr>
<td>30-36 mos.</td>
<td>No speech, or speech that is VERY hard to understand</td>
<td>Example of speech delay at 30 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Example of speech delay at 32 months</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Milestones of development at 36 months</td>
</tr>
<tr>
<td>36-42 mos.</td>
<td>Little speech or speech can’t be understood</td>
<td>Red flags for development at age 3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>More red flags for age 3</td>
</tr>
<tr>
<td>42-48 mos.</td>
<td>can’t or won’t play with peers;</td>
<td>Red flags for development at age 4</td>
</tr>
<tr>
<td>48-60 mos.</td>
<td>can’t follow directions or express what they want</td>
<td>Red flags for development at age 5</td>
</tr>
</tbody>
</table>