



# Important Communication Milestones

## 3 – 6 months

- Smiles spontaneously to human contact
- Smiles when playing alone
- Smiles at faces of several family members
- Stops crying when spoken to
- Shows different responses to different family members

## 6 – 9 months

- Responds to "Come here"
- Becomes more outgoing with familiar people
- Shows anxiety when separated from favorite caregiver
- Likes to be with specific people

## 9 – 12 months

- Reacts to others' moods
- Is fearful of strangers
- Can tolerate momentary loss of contact with caregiver in unfamiliar places
- Shows off to get attention

## 12 – 18 months

- Has an expressive vocabulary of between 5 – 20 words
- Is aware of the value of communication
- Follows simple directions, especially with gesture
- Practices intonation, sometimes imitating an adult
- Uses mostly nouns with a few others, such as "down" or "up"
- Uses much, meaningful jargon with inflection and emotion

## 19 – 24 months

- Names common objects
- Uses two or three more prepositions such as "on," "in," or "under"
- Uses noun + verb consistently
- Family understands about 2/3 of what child says
- Receptive and expressive vocabulary is about 150-300 words
- Rhythm and fluency of speech is poor
- Uses "I," "me," and "you," but may confuse "I" and "me"
- Control of pitch and volume is poor
- "My" and "mine" emerging (like a vengeance!)
- Follows commands, such as "Show me your nose"

What is Evidence-Based Practice (EBP)?, *continued*

**Evidence Hierarchy**

In order to critically appraise the research you find for its merit and feasibility for use in your therapy intervention, use an evidence hierarchy which ranks the study designs based on their ability to protect against bias (i.e., objective vs. subjective).

LEVEL	DESCRIPTION
I	Well-designed meta-analysis of more than one randomized, controlled trial (RCT)
Ia	One well-designed RCT
II	One well-designed controlled study without randomization
IIa	One well-designed, quasi-experimental study
III	Well-designed, nonexperimental studies (i.e., correlational and case studies)
IV	Expert committee reports, consensus statements, clinical experience of respected authorities

**Level I** evidence is considered the strongest because the study designs strictly adhere to rules concerning the control of bias. The most common biases that may affect a research study are:

- Subject selection bias – subjects not representative of target population
- Measurement bias – too few or too many tools used to measure outcomes
- Intervention bias – includes factors, such as treatment contamination, timing of intervention, treatment site bias, and use of different therapists to deliver intervention

**Level II** evidence includes studies in which randomization is not employed but which still control for bias. Study designs in which the

subjects are not randomized to conditions, but experimental procedures are still used, are also included at this level.

**Level III** evidence includes non-experimental studies. Examples of this type of research involve observational research, survey research, and archival research.

**Level IV** evidence is reserved for expert opinion and the experience of respected authorities in the field. Although some consider it to be the weakest level of the hierarchy, we feel that it is important to acknowledge its significance since SLPs rely on expert opinion to make clinical decisions.

**Systematic Reviews and Professional Guidelines**

Systematic reviews and professional organizations' guidelines are also useful tools when searching for clinical evidence. Evaluate them in terms of their appropriateness for your clients. Ask yourself if the guideline is relevant to your clinical question and is evidence-based. Also consider who published the guideline.

Regardless of which type of evidence you use, it is most important to consider the individual needs of each client who will benefit from your intervention.



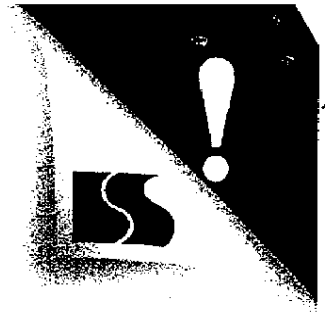
Look for this symbol throughout this catalog to find EBP statements relevant to our products.

**References**

American Speech-Language-Hearing Association. (2006). *Introduction to evidence-based practice*. Available online from [www.asha.org](http://www.asha.org)

Bury, T., & Mead, J. (1998). *Evidence-based healthcare: A practice guide for therapists*. Oxford: Butterworth-Heinemann.

Dollaghan, C. (2004). Evidence-based practice: Not all evidence is created equal. *The Newsletter of the Illinois Speech and Hearing Association*, 8-9.



## 25 – 36 months

- Uses "I," "you," and "me" correctly
- Uses some plurals and past tenses
- Knows principle body parts
- Uses three-word sentences
- Has about 900 words
- Family understands about 90% of what child says
- Verbs emerge quickly
- Understands and responds to questions dealing with immediate environment
- Tells about his experiences
- Can answer thinking questions, such as "What do you want when you're thirsty?"
- Gives name, age, and gender
- Understands much more than he expresses

## 4 years

- Knows names of animals
- Uses at least four prepositions
- Knows some colors
- Can repeat four digits when given slowly
- Can repeat a four-syllable word
- Knows contrasts such as "larger" and "longer"
- Follows directions when desired object is not in sight
- Repeats many words, phrases, syllables, and sounds
- Loves make-believe and takes on multiple roles during play
- Talks extensively during play by himself or with others

## 5 years

- Uses adjectives and adverbs extensively in conversation
- Knows opposites such as "on-off," "big-little," "heavy-light," and "soft-hard"
- Counts to ten
- All speech should be intelligible, but articulation errors may persist
- Can repeat sentences as long as nine words
- Can define common words, such as "shoe," "chair," "hat," and "bird"
- Can follow three-stage commands without help
- Understands simple time concepts, such as "morning," "later," and "tomorrow"
- Verbal language is generally correct
- Uses long sentences, including some compound and complex constructions





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**Stuttering Disorders in School-Aged Children** – by *Nina Reardon-Reeves, M.S., CCC-SLP and J. Scott Yaruss, Ph.D., CCC-SLP*

This course provides an overall view of the assessment and treatment of school-aged children who stutter. Practical strategies are outlined and interactive activities are used to enhance participants' understanding of the concepts presented.

0.4 CEUs/4 CEEs

**Attention Disorders** – by *Clare B. Jones, Ph.D.*

This course is designed to help the SLP learn more about AD/HD and to provide the latest information on treatment and management of the disorder. A thorough description of the disorder is provided, along with conclusions from current research and practical suggestions for assessment, behavior management, and adaptations for clients ages birth to adult.

0.2 CEUs/2 CEEs

**Changing Behavior to Change the Child's Voice** – by *Nancy B. Swigert, M.A., CCC-SLP*

This course describes the causes and sequelae of vocal abuse in children. The course describes ways to use reinforcement to change the child's behavior to eliminate vocal abuse and to increase use of vocal hygiene techniques. Strategies to gain the support of adults in the child's environment and ways to help the child transfer skills to all settings are addressed.

0.2 CEUs/2 CEEs

**Intervention Strategies for ELL with Language Learning Disabilities**

– by *Celeste Roseberry-McKibbin, Ph.D.*

This course describes intervention materials and strategies for English Language Learners (ELL) with language-learning disabilities (LLD). Therapy techniques and materials appropriate for students in preschool through adolescence are presented. Suggestions for integrating strategies and materials and working with families are included.

0.2 CEUs/2 CEEs

**Reading Comprehension Strategies** – by *Regina G. Richards, M.A.*

This reading comprehension course progresses from global ideas and general strategies to actual pre-reading and reading strategies. Emphasis is on the importance of using a variety of pre-reading strategies and extensive vocabulary development activities. (Concrete suggestions for implementing are provided.) The strategies presented are based on known evidence regarding how the brain learns best and incorporate recommendations by the NRP and Reading First. The reader is encouraged to participate in and practice several of the activities. The presentation concludes with an application activity, a lesson plan for expository text with middle-school or secondary students.

0.3 CEUs/3 CEEs

TEACHING SOUND FORMATION  
(FOR THE TEACHER OR TUTOR)

NOTE: Teach formation of a sound only if a student is having difficulty associating the sound with the symbol, or if the student is having difficulty discriminating between two consonants. For example: Bb and Dd.

The following sound formations are approximate:

- Bb Lips touching, voiced breath, at beginning of sound
- Pp Lips touching, voiceless breath
- Dd Tongue touching roof of mouth, voiced breath, mouth open
- Tt Tongue touching roof of mouth, voiceless breath
- Vv Upper teeth touching lower lip, voiced breath
- Ff Upper teeth touching lower lip, voiceless breath
- Gg Back of tongue against roof of mouth, voiced breath
- Kk Back of tongue against roof of mouth, voiceless breath
- Hh Mouth open, short, voiceless breath
- Jj Upper teeth almost touching lower teeth, tongue touching roof of mouth, voiced breath
- Ll Tip of tongue against upper teeth ridge, voiced breath
- Mm Lips closed, voiced breath through nose
- Nn Mouth open, tongue against roof of mouth, voiced breath through nose
- Rr Curving tongue against roof of mouth, voiced breath
- Zz Teeth almost touching, tongue relaxed, voiceless breath
- Ss Teeth almost touching, tongue relaxed, voiceless breath
- Ww Pursing lips, voiced breath
- Yy Tongue tip down, middle of tongue curved almost to roof of mouth, voiced breath

## A Comparison of Developmental Scales for Articulation

Ages are given in years and months.

Blends develop later, average 4-6 to 5-6.

<u>Speech Sounds</u>	<u>Age Range</u>	<u>Average of Scales</u>
M	3-0 to 3-6	3-2
W	3-0 to 3-6	3-2
H	3-0 to 3-6	3-2
P	3-0 to 4-0	3-6
B	3-0 to 4-0	3-8
N	3-0 to 4-6	3-6
NG	3-0 to 6-0	4-6
Y	3-6 to 4-6	4-0
F	3-0 to 5-6	3-9
D	4-0 to 5-0	4-4
T	4-6 to 6-0	5-3
K	4-0 to 4-6	4-2
G	4-0 to 4-6	4-2
TH+	5-0 to 8-0	6-8
TH-	6-0 to 8-0	7-2
SH	4-6 to 9-0	6-6
CH	4-6 to 8-0	5-11
J	6-0 to 7-0	6-6
L	4-0 to 6-6	5-10
R	4-0 to 7-6	6-0
ER	6-0 to 7-0	6-6
V	5-0 to 8-0	6-7
S	4-6 to 8-0	6-7
S	4-6 to 11-0	7-2
Z	5-0 to 9-0	7-3