



ECI Coding Definitions

These coding procedures are designed to record communication as it occurs during the Early Communication Indicator (ECI) assessment. The following key skill elements are coded: Gestures (G), Vocalization (V), Single-Word Utterance (W), and Multiple-Word Utterances (M). When coding, the child does not have to demonstrate a clear communicative intent, although the behaviors coded typically serve a communicative function. However, the behavior must meet the specific observable criteria described below.

"Partner" in these definitions refers to the person playing with the child while he/she administers the ECI.

General Criteria

"Utterance" refers to a single communication. An utterance may include a gesture, vocalization, single-, multiple-word, or some combination of those elements. Utterances are separated by a pause or breath.

When coding, recorders should differentiate between engagement and communication. Engagement occurs when a child is interested in the materials and or events. Communication occurs when the child attempts to convey a message to the adult partner. Children may be very engaged with the materials and toys, but not communicating with the adult partner; these behaviors should not be coded as communication (e.g., the child reaches into the house to move a figure from one room to another, the child puts an animal figure on top of the blocks or holds up a figure without giving it to the play partner).

Each communication utterance is tallied in the appropriate cell on the coding form. Each minute of coding is scored in a separate row on the coding form. To account for the greater complexity of skill involved in using single- and multiple-words, the online data system weights single- and multiple words to make a total weighted communication score. Each single-word utterance is given a weight of two (each tally is multiplied by two); each multiple-word utterance is given a weight of three (each tally is multiplied by three).

Updated 04/11

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Definitions of Key Elements of Communication

Gesture (G)

Gesture is a physical movement made by the child in an attempt to communicate with the partner.

An episode ends when there is a clear and distinct change in child's movement.

<p>Includes:</p> <ul style="list-style-type: none"> • giving an object to the play partner • taking an object from a play partner • pushing away or rejecting an object • reaching toward a partner or object the partner is holding • pointing toward an object or person • nodding or shaking head to indicate "yes" or "no", shrugging shoulders • gestures made in conjunction with vocalizations, single- or multiple-words 	<p>Excludes:</p> <ul style="list-style-type: none"> • reaching for toys the partner is not holding or is only holding to stabilize it • moving toys in a way that does not involve interaction with the partner • physical movements that appear to be coincidental • physical movement showing excitement or pleasure that is not in direct communication with the partner, (e.g., waving arms, rocking back and forth)
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Vocalization (V)

Vocalization is a non-word or unintelligible verbal utterance voiced by the child to a partner. Utterances that are coded as vocalizations are those that cannot be understood as single- or multiple words. When vocalizations co-occur in utterances where single- or multiple-words are understood, the vocalization(s) should not be recorded. Vocalizations are only recorded when they occur in an utterance consisting only of vocalizations, or gestures and vocalizations.

An utterance ends when there has been a clear break of at least one second without vocalizations (count to yourself: "one thousand one") or a breath.

<p>Includes:</p> <ul style="list-style-type: none"> • laughing out loud • animal sounds, e.g., "moo," when looking at a cow • transportation/motor sounds, e.g., "vroom," when pushing a tractor • sounds such as "ah," "da," "eee," etc. • vocalizations that serve as fillers, such as "mm," or "huh" 	<p>Excludes:</p> <ul style="list-style-type: none"> • crying • involuntary noises (e.g., hiccups, burps) • vocalizations that occur with a recognizable word or word combinations
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Single-Word Utterance (W)

A single-word utterance is a single word voiced by the child that is understood. Each single word utterance is given a weight of 2 (each tally is multiplied by two). This calculation is done automatically through the website as child assessment data are entered into website. Otherwise, you will need to do the calculations on the coding form.

Includes:	Excludes:
<ul style="list-style-type: none"> • an utterance in which only one word is understandable • continuous repetition of a single word, e.g., "go, go, go" (code only one even if they are separated by more than a breath) • compound words, e.g., "mailbox," "necklace" (code only one) • ritualized duplications, e.g., "bye-bye," "uh-oh," "night-night" (code only one) • two part proper names, e.g., Big Bird, Mary Jane • sequentially describing or naming objects, e.g., "block, red, blue, girl" (tally for each word) • standard sign language, code as appropriate for single words 	<ul style="list-style-type: none"> • vocalizations that serve as fillers, such as "mmm," or "huh" • sentences or a phrase combining multiple understandable words (code as M) • utterance in which no words are understood (code as V) • nouns in other languages preceded by an article are coded as a multiple word (e.g., "la playa" coded as M)

Multiple-Word Utterance (M)

A multiple-word utterance is a combination of two or more different words voiced by the child that are understood. In this case, an utterance consists of a sentence or multiple words that go together.

Do not separate "false start" or stuttering into another utterance (code as one). False starts are when a child starts to say something, but before finishing the sentence or thought, changes wording to another sentence. E.g., "I think this is . . . this looks like a dog." Code this as one multiple-word utterance.

Each multiple-word utterance is given a weight of 3 (each one is multiplied by three). This is done automatically through the website if child data are entered into the website. Otherwise, calculations should be made on the coding form.

Includes:	Excludes:
<ul style="list-style-type: none"> • words should fit together in a meaningful way that approximates a phrase or sentence, e.g., big truck • does not need to be grammatically correct, e.g., "me go to store" • does not need to have adult meaning, "cow rides tractor" • standard sign language, code as appropriate for multiple-word utterances • Nouns preceded by an article (e.g., "la leche") 	<ul style="list-style-type: none"> • unless coder can state exactly what child said, code as V • if no words are understood, code as V • utterance in which only one word is understood, code as W • utterance in which no words are understood, code as V

Notes on Coding Bilingual Communication and Sign Language

All words, regardless of the language in which they are communicated, should be scored, including those communicated in sign language. Therefore, the coder should be fluent in any language regularly used in the child's environment. Failure to code these communications will result in an invalid assessment and should not be compared to norms, nor should they be used in intervention decision making.

Articles are coded as a word, regardless of the language. So "el hombre" would be coded as a multiple word utterance, not a single word.

Sign language should be coded like any other language. However, if a child uses sign language at the same time he/she is speaking or vocalizing, code both. So, if a child signs "more please" and says "more please," then two multiple words would be coded.