

## Communication Act Coding V4

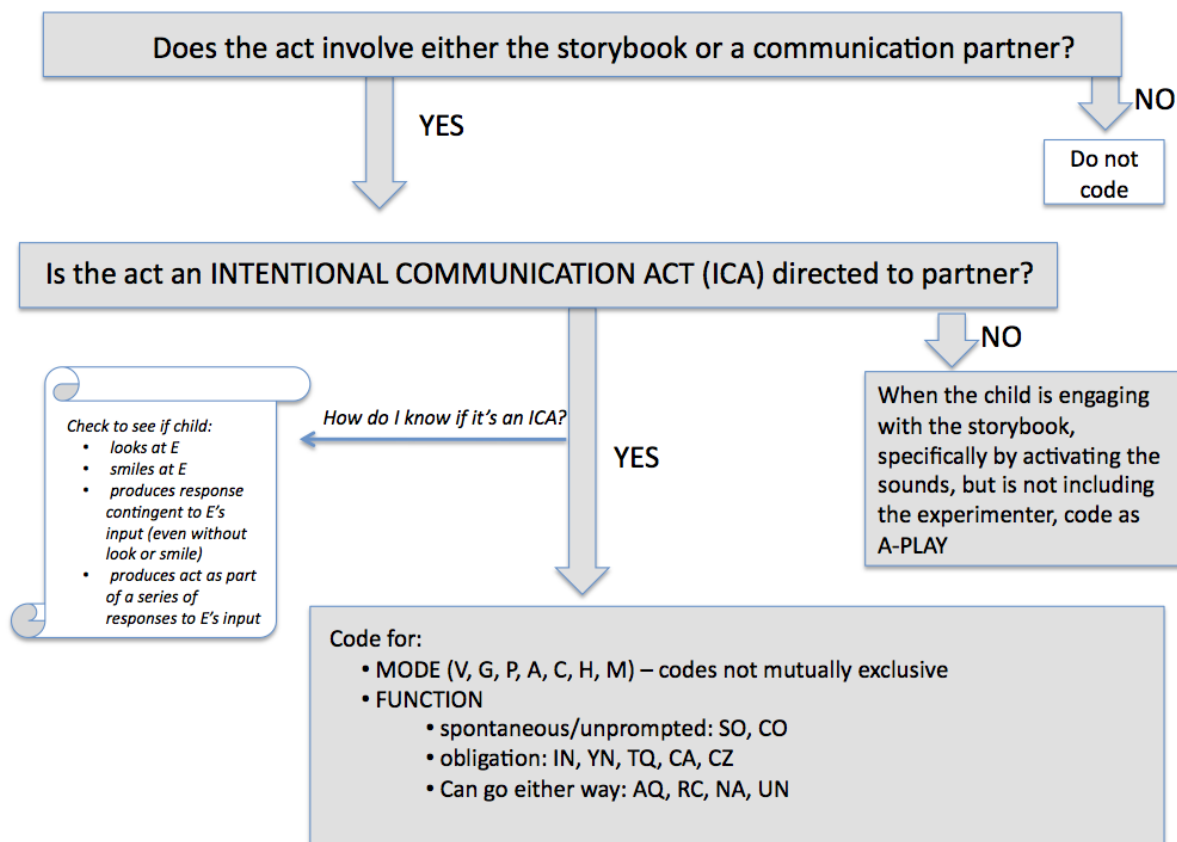
Krista M. Wilkinson, Ph.D. (Principal Investigator)

### Purpose:

The purpose of this scheme is to characterize the communication behaviors of children as they engage in shared book reading using an aided AAC device. The scheme seeks to characterize the mode, function, and conversational role of each communication act by the child. Selected additional aspects of the dyadic interaction are also characterized.

### Structure:

The coding consists of a series of decisions that are made about the behaviors of the target children during a social interaction. Flowchart #1 illustrates the general flow by which decisions are made. The specific definitions of terms within Flowchart #1 are provided in this manual, along with illustrative examples.



Flowchart #1

### **Decision#1: Does the act include book materials or partner?**

When observing the tape, you will be watching for all behavioral acts on the part of the child. Whenever you see the child produce a behavior, your first decision will be about whether or not the behavior involves either the book materials (these include both the storybook as well as the symbol display, irrespective of how those two stimuli are presented) or the communication partner(s). Communication partners can include not only the experimenter (referred to herein as E) but also any other people in the room to whom the child directs an act, or who requests communication from the child (this is often a mother who is watching).

You must be careful to **ONLY INCLUDE OVERT EXECUTED ACTS**. This coding scheme is looking at the expressive behaviors of the child. A child who pauses in the shared book reading to listen to the E read the book is showing pragmatic skills (waiting) but is not producing any overt behavior of his/her own. This pause would therefore not be considered a behavioral act that could be coded. Turning to E to watch her, or smiling as E speaks is similarly not an overt expressive act that could be coded here. There are other coding schemes we apply to capture this, but it is not the focus of this scheme.

You have two choices at this first level of decision:

- The act is **NOT** directed toward a partner or the book materials. In this event, you do not apply any code to the behavior, although you might write it down as context in the transcript.
  - Example: Child picks up the mouse, examines it
  - Example: Child begins to play with the toy animals on the table
  - Example: Child gets up and walks off
- The act **IS** directed toward a partner or the book materials. In this event, you transcribe the act and move to the next level of decision (Decision #2).
  - Example: Child activates the symbol for “COW,” using the mouse
  - Example: Child points to the COW in the book
  - Example: Child turns and vocalizes toward A

## Decision#2: Is the act an ICA (intentional communication act)?

Once you've decided that a behavioral act involves either the communication partner or the book materials, you will need to decide if that act is an intentional act of communication. You have two options at this level of decision:

- The act IS an intentional communicative act directed at the partner, or
- The act is a deliberate act of behavior but is NOT an intentional communicative act that is directed at the partner, but does involve the storybook materials

How do you know when an act is an ICA as compared to a deliberate act that is not communicative in nature? This requires you to use clinical judgment.

**Acts that ARE ICAs.** An act is intentionally communicative when the child somehow deliberately appears to seek to engage E or obtain a response from E. Cues that the child seeks a response include:

- *Eye contact:* The child turns to look at the partner before, during, or after the production of the act. The following would be an example of a transcript in which the child's act was clearly intentional, on the basis of eye contact. Note that by itself, the eye contact would NOT be coded as an ICA. Rather, the eye contact is supporting evidence that the child's other overt act is an ICA.
  - = child is looking at storybook, E is watching
  - C: XX {vocalizes, looks over at E}
  - E: Yes, that's Grover!
- *Other forms of engagement:* The child seeks to engage the partner or to solicit a response from the partner before, during, or after the act, even if that bid is not through the use of eye contact. The child might tap the partner, for instance.
- *Persistence, satisfaction:* Sometimes the child will produce one act and we are not sure if it is actually communicative, because the child does not look or otherwise engage the partner right away. However, if the child then produces a second act that appears to be related to the first and that appears to now solicit E's engagement through something like eye contact, we might code both the first and the second as ICAs (even though only the second one has the clear signal). Other signals of "persistence" include addition or changing of the mode of the act (pointing in the first act, then pointing and vocalizing in the second) or changing the nature of the act (vocalizing, then vocalizing again more loudly). This is particularly true if the child then appears satisfied when E engages. Here's an example:
  - = child is looking at storybook, E is watching
  - C: XX {vocalizes, but doesn't look at E}
  - = E doesn't respond
  - C: XX {vocalizes again, louder, and adds a point}.
  - E: Oh, Grover!
  - = C smiles

**Acts related to the book materials, but that are NOT ICAs.** One of the possible outcomes of Decision #2 is that the act, although it involves the book materials, is not an intentional communication act. In these instances, the child is activating the sound output on the aided display in order to listen to the sound it produces, but is in no way engaging E or any other partner(s). Essentially, the child is exploring the display and/or playing with the sounds. You get these most often when the child is encountering a book/display for the very first time, at the beginning of sessions when the child is re-acquainting him/herself with the display, and during periods when E is chatting with another adult. This often takes the form of the child activating a symbol over and over again, just listening to it, or can also take the form of the child moving one by one through each symbol to activate it. The key is that the child IS NOT in any way seeming to care whether or not the adult is paying any attention or not. In this event, the child's act is coded as A-PLAY. This will allow us to capture the extent to which the child is engaging actively with the materials even if s/he is not including the experimenter. Acts that are coded A-PLAY do not go on for any further coding.

### Decision#3: Coding the ICAs

When you decide an act is an ICA, you will be coding each ICA on two dimensions. You will code for the *mode* in which the act was produced and the *function* for which it was intended. YOU MUST CODE EVERY ICA FOR BOTH DIMENSIONS.

#### Dimension 1: MODE

The mode of the act refers to how the act was actually produced; vocal, gestural, point to book materials, independent aided, hand-over-hand aided, or general “mouse grab.” The mode code is the only one for which more than one code can be applied (it is not mutually exclusive). Thus, a single act might contain both a vocalization and a gesture, or a vocalization and a point to the book materials.

- *Vocal (V)*: Any communication act that contains a vocal component. This is most typically a word, an unintelligible vocalization.
- *Gestural (G)*: Any communication act that contains a gesture, with the exception of points to the book materials (which are coded as Points, below). Gestures include conventional gestures (nodding the head, waving hello, blowing kisses), showing (holding up an animal to show the E), pointing to materials other than the book or the symbol display (ie, pointing to the animal figures), or idiosyncratic gestures that are clearly communicative.
- *Point (P)*: Whenever the child uses a finger to point to either the storybook itself or to the communication symbol display, this is coded separately as a “point.” Note that selecting the symbols using the mouse is a true aided selection (A or H; below) and that pointing to things other than the book or symbols is considered a gesture (G; above). Code P only when the child is using a finger to refer to the book materials themselves.
- *Independent aided activation (A)*: An independent aided symbol selection is one in which the child moves the mouse independently, with no help from E, and produces an independent activation of a selected symbol.
- *Guided positioning (C)*: When the mouse is placed in the correct place and left for the child to activate on own. The adult has positioned the mouse/cord in the correct location, leaving it up to the child to activate. The child does NOT move the mouse in this code.
- *Hand-over-hand aided activation (H)*: When the child needs assistance from E to use the mouse to select, use this code. This reflects the child’s desire to use the aided activation even if assistance is needed.
- *“mouse grab” (M)*: Code this when the child makes a grab for the mouse but does not use it to activate a symbol. This is a fairly rare code but is needed for children at the very outset of learning to use the mouse. As a child begins to learn what the mouse is for, they may reach for the mouse in a fairly gross or imprecise manner. We would like to capture this.
  - Note that we would NOT code M for any act that results in an activation – those would either be coded A (if independent) or H (if assisted).

- Note also that we do not code this anytime the child has their hand resting on the mouse. (that is captured in a different scheme). This code is reserved for overt grabs at the mouse that do not result in activation.

## **Dimension 2: FUNCTION**

The function of the act refers to the apparent intended function that the child appears to be using the act for. Although to some extent this reflects the conversational function of the utterance, it can be hard to determine because we have to infer what the child seems to want to do with the act. However, it is possible to come to agreement on functions like this. In addition, there is always the “unclear” category. When coding, the function of any oral prompt given by E will override computer directions displayed on the screen.

The functions we will be coding include:

### **Spontaneous/unprompted:**

- *Social conventions (SO)*: These are acts that are used to engage in the social niceties of engagement. These acts most typically involve just the child and the partner (ie, they are not “about” anything else beyond the child and the partner). Most commonly, these are acts that perform the function of:
  - greeting a partner,
  - waving goodbye,
  - offering agreement, emphasis
  - pride in oneself
  - show off
  - This can also be social filler, such as “yea” or “uhhuh” when a partner pauses in talking
- *Commenting (CO)*: These are acts that are used to comment or reflect on some object, action, or event that is going on in the interaction. Note that comments in general are spontaneous – that is, if they are in response to a question, they should be coded IN or YN. These can be:
  - expressions of emotional response to something (“that’s cool!” or “yuck”),
  - descriptions to the content of the book (“it’s big” or “duckie!”),
  - other responses to the content of the book (providing sound effects, such as quacking when the duck symbol is pressed or a duck appears in the storybook, pointing to story book in middle of screen in response to something that has happened)
  - expressions of accomplishment of an act (“I did it!”)

### **Obligation:**

- *Providing information (IN)*: These are acts that provide the partner with some SPECIFIC form of information, most typically, information that has been requested by the partner. Thus, while acts coded as comments (CO) do offer information, they are more generally spontaneous whereas acts coded as IN are offering a discrete piece of information that has been sought. These can be:
  - Answering an informational question (answering “Where to next?”)

- Clarifying
- Offering a correction when E has misunderstood
- This code overrides NA
- *Answering Yes/No (YN)*: These are one-word answers in the form of yes/no or nods or head shakes:
  - Answering yes/no questions
  - This can also be commenting – so when she comments “no!” to a noise she doesn’t like
- *Answering Test Question (TQ)*: These are responses to explicit test questions where there is **one** and only one answer sought. These are often when E is asking the child to identify some specific symbol or provide one specific answer. For instance, the question “How is Clifford feeling” when Clifford is looking abashed has one and only one answer. If there is more than one possible answer, then the code is IN not TQ.
  - Answering a question like, “Who says moo?” or, “Who is eating cookies?” or, “Show me the cow”
- *Capitulation (CA)*: This code is applied when the child does something that has been directly requested for the child to do, and is often an imitation. Note that to apply this code, the experimenter must have specified exactly what the child is intended to do. For instance, the experimenter may say “click on this one” and point to the specific symbol to be clicked. Or, the experimenter may say “let’s go to the next page” and indicate the navigation button. This is the most common scenario. Note that we are going to code a separate category for navigation (NA, below) that will be used when the navigation choice is left up to the child. Thus, just as in content symbol use, capitulation (CA) is used only when there has been a direct request by the experimenter for specific navigation.
  - When this code co-occurs with NA, (asking the child to click and navigate) CA overrides NA
- *Cloze (CZ)*: This code is applied when the experimenter has said something and waited for a response
  - “PJ is going to the....”

### **Can go either way:**

- *Ask question (AQ)*: This code is applied when the child directly asks a question of the communication partner(s).
- *Request/choice (RC)*: This code is applied when the child’s actions or speech are used to regulate E’s behavior. For example, when a child points to the book and indicates that s/he wants E to read what is on the screen, that would be considered RC. This is a request that is not in response to a direct question. (if it is response to a question, we coded as IN).
- *Navigation (NA)*: There are times when the child makes a selection specifically and only to navigate to the next page. This is applied almost exclusively when the book is set up without navigational content symbols. For instance, while in PJ selecting an animal content symbol also navigates to that animal’s page, in a linear book like sesame street one has to use either an arrow key or click on the center storybook

page to move along. In the case of PJ, the symbol selection would be coded under the content functions (RC, CA, IN, CO) because the navigation is folded into them. However, in Sesame Street the navigation itself is a function. In that one, clicks to move the book to the next page are given this NA code.

- *Unclear (UN)*: There will always come a time when you either simply can't tell what the child intended or there are two equally plausible functions you could assign, and you can't decide between them. It is always necessary, then, to have an "unclear" option to assign. Use this for either of these two situations.