EMT en Español Adult-Child Interaction Code

Red text indicates adaptations for ASD project.

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Introduction

The Adult-Child Interaction Code is used to code videos transcribed in the SALT software (Miller & Iglesias 2012). The codes are applied to transcribed utterances to measure behaviors. For the Caregiver-Child Interaction videos, both the adult and child are transcribed and coded. For the Language Sample videos, only the child is transcribed and coded.

The child codes measure the following behaviors:

Behavior	Description
Independence	The level of support needed to communicate. The codes range from unprompted (spontaneous) to prompted (in direct response to an adult prompt).
Communicative Form	The form of the child's communication. For the purposes of this code, only words and communicative gestures are coded.
Non-response and opportunity to respond	Whether the child had enough time between the adult's communicative turns to respond, and if they did not respond when given time.
Unintelligibles and Vocalizations	Child attempts at communication that are either unintelligible or only contain vocal overtones with no attempted words.
Linguistic Errors and Code Switching	Codes designed by SALT to measure linguistic errors and code switching between languages.

The adult codes measure the following behaviors:

Behavior	Description
Matched Turns and Pacing	Whether the adult's turn was "matched" (in response to) a child communication turn or a play act that the adult is using to model language, and how the adult paces their communicative turns when not responding to the child.
Language Targets	If the language in the adult's communicative utterance is a language target for the child. Targets are determined by the child's current level of communicative ability.
Language Expansions	How the adult expanded the child's language when possible. Expansions may include adding language to the child's utterance and providing different conjugations for verbs used by the child.
Responsiveness and opportunity to respond	Whether the adult had enough time between the child's communicative turns to respond, and if they did not respond when give time.
Linguistic Errors and Code Switching	Codes designed by SALT to measure linguistic errors and code switching between languages.
Time Delay Scores	How well the adult executed non-verbal prompting sequences.

General coding rules:

1. All codes come before the period.
   Example: c cook food **[u]**.
2. For every other code, there must be a space in between the last word and the first [.
3. You do not need to capitalize the coded letters; [u] OR [U] is acceptable.
4. Make sure that you use accent marks where appropriate in Spanish so that SALT can count the number of unique words accurately. For example, SALT would count "esta pelota" and "esta jugando" as the same word without the accent in está.

Child Codes:

Single Codes	***Independence***	***Form***	***Linguistic Codes***
[n] – no response	[u] – unprompted	[w] – words	[cs] – code switch*
[o] – no opportunity	[e] – elicited	[g] – gesture	[wo] – word order
[t]- action	[i] – imitated	[z] – AAC	[ew] – extra word
[cx] – unintelligible	[p] – prompted		[f] – fragment
[vu] - vocalization			[ew:__] – word error
[nc] – non-content word*			

*These are Word Codes that are attached directly to each word with no space

Coding Instructions

At the end of each line, you will either insert one Single Code or insert a code from each category (Independence, Form). Linguistic Codes should be used whenever appropriate.

Example:

c{vocalizes} [vu].
c mira|mirar [u][w].

Linguistic codes and Word Codes may be applied as necessary.

Child Single Codes:

1. **No Response [N]**: the child does not respond to an adult turn within **3 seconds**.

Example:
a ayuda [mt][ix][nt].
c [n]. ← 3 seconds pass between adult turns
a aquí [ut][ix][nt].

Example:
a despierta|despertar [ut][ix][at]!
c [n].
c {off} [t].
a {off} arriba|| [mt][ix][at].

Example:
A no, pinguino
C xxx[nc] pinguino [i]
(unintelligible words don't change the imitation)

2. **No Opportunity [O]**: the child has less than **3 seconds** between the adult's turns.
Example:
a sí sabes|saber [mt][ix][nt]?
c [o]. ←1 second passes between adult turns
a pon|poner del más grande al más chiquito|chico [ut][ix][nt].
c [o]. ←0 seconds pass between adult turns
a del más grande al más chiquito|chico [ut][ix][nt].

3. **Child Action [T]:** Child does a play action that the adult immediately imitates to execute Mirroring & Mapping. Communicative gestures are *not* considered play actions and do not receive this code. **Note: This code is only used in the CCX Play.**

Example:
c {covers} [t].
a {covers} tapamos|tapar [mt][ix][at].

[t] is only used as the single code for a given utterance. If the child does a play action AND says something unintelligible, code as [cx].

Example:
c {pretends to eat} xx [cx].
a {pretends to eat} comemos|comer [mt][ix][at].

If the child does a play action and says something intelligible, transcribe the intelligible word(s) and code the line for the words.

Example:
c {drives car} carro [u][w].

4. **Child Unintelligible [CX]:** The child is saying a word and NOT vocalizing, that one cannot understand. This code is only used if the entire utterance is unintelligible. If part of the utterance is intelligible, code for the intelligible word(s).

Examples:
c x [cx].
c x elefante [u][w].

Note: This code is only used if you are sure the child is intentionally trying to communicate (i.e., not vocalizing or stimming) but the words are not clear enough to be understood.
This code can be used along with other codes if the child also gestures in the utterance.

Example:
c {grabs} xxx [cx][u][g].

5. **Vocalization [VU]:** the child **only** vocalizes with no secondary indicator of a specific function (e.g., gesture, such as a reach or point, trying to open something while looking at the adult).
*{sounds} e.g., sound effects are considered vocalizations and will be coded [vu].

Example:
c {vocalizes} [vu].
c {sounds} [vu].

Nonexample:
c {vocalizes, points} [u][g]. ← The child also gestured, so the gesture gets coded instead of the vocalization. The gesture is a higher level skill.

Definition for [vu]

Vocalizations that are potentially communicative but are *not* coded as unintelligible [cx] or as intelligible words [w]. When vocalizations co-occur in utterances in which single or multiple words are understood, the vocalization(s) should not be recorded. Vocalizations that are not coded [vu] do not need to be transcribed.

Examples (potentially communicative)	Non-examples (not communicative)
Child whines with eye contact. C {voc} [vu].	Hiccups or other involuntary noises (not transcribed)
Child vocalizes when mom arrives. C {voc} [vu].	Sensory-seeking noises (these will probably be unique to the child and repeated regularly) – e.g., growling noises, whispers, squeals (not transcribed)
Code screams as vocalizations when the child is communicating that they are upset but not if they are just crying. C {screams} [vu].	C {voc} más [w].
	Laughing or crying (unless making direct eye contact and clearly communicative).

Vocalizations are more likely to be communicative when they are paired with gestures and/or eye contact or when they are related to something in the environment. Vocalizations are more likely to be non-communicative when they are involuntary, unrelated to the environment, and not paired with gestures or eye contact. A rule of thumb is to ask yourself whether the child would make the

vocalization if you were not in the room. If the answer is yes, then it is probably *not* communicative and would not be transcribed or coded. However, err on the side of communicative if you think there is a chance they are communicative.

6. **Non-Content Words [NC]:** The child used an expressive or unintelligible word that will not be included in the child's Number of Different Words or Total Words analysis. This is a Word Code, which means it gets directly attached to any and all applicable words.

   The list of expressives includes:
   uhoh
   uhhuh
   wow
   oh
   ohno
   whoa
   ok
   yay
   yum

   Examples:
   c xxx[nc] [cx]. ← the unintelligible chunk is treated as a word and [nc] is attached
   c uhoh[nc] [u][w]. ← [nc] is attached to "uhoh"
   c oh[nc] ok[nc] [u][w]. ← [nc] is attached to both "oh" and "ok"

   Non-Content Words [nc]

   These may also include scripting, or when the child recites a phrase or series of words (e.g., alphabet, numbers) repeatedly. Letters and numbers should be counted as words (not [nc]) if they are referencing a specific letter or number visual, or if the child is talking about the number of items present.

Examples of [nc]	Non-Examples
C {A, B, C, D}[nc].	C {points to letter A in book} A [w].
C {singing}.	C {holding 2 cars} Two [w].

Independence:

The level of support the child needs to communicate.

1. **Unprompted [U]:** The child takes a spontaneous turn – not prompted, imitated, or elicited by the adult. If the child is responding to a question, it is not spontaneous. If they are following an adult statement with their own statement, it is spontaneous. If the child imitates part or all of the adult's previous communication, but changes the mode of communication (i.e., adult speaks and child presses the adult's word on the AAC), it is considered unprompted [u]. If the child stays in the same communicative mode but adds language to the adult's previous communication then it is considered unprompted [u].

If the child repeats what the adult says but it happens more than 3 seconds after the adult speaks, it is considered [u].

Example:
a perro.
c caballo [u].

Example:
a perro.
c mira|mirar el perro [u]. ←here the child expanded the previous utterance and added new language

Example:
a pelota.
c {signs ball} [u]. ←here the child changed the mode of communication to signing

Example:
a manejamos|manejar el carro.
c {five seconds after} manejamos|manejar [u]. ←here more than 3 seconds have passed which moves the child's communication into unprompted

2. **Prompted [P]:** The child takes a turn in response to an adult prompt. These will typically be a "say" or choice prompt, where the response options are included in the adult's turn. Child utterances in response to a time delay or other questions do **not** count as prompted, unless the child repeats the words spoken in the question when responding. This is because in that instance, the child is both being elicited to communicate AND imitating the word(s) the adult is saying, so it is the least independent.

   Example*:*
   a di|decir perro.
   c perro [p].

   Example*:*
   a comemos|comer sandia o comemos|comer pan?
   c comemos|comer pan [p].

3. **Imitated [I]:** The child imitates all or part of the preceding adult communicative act (words, AAC, gesture) but does not add anything to it. If the child adds words or changes the mode then it is [u]. The child must imitate the utterance within 3 seconds to be considered [i]. If the child repeats any or all of the previous adult utterance but it occurs *after* 3 seconds, it is considered [u]. If on the line of 3 seconds, code [i].

   Examples:
   a perro.
   c perro [i].

   a {signs dog}.
   c {signs dog} [i].

   a {points} un niño.

c el niño [i].

a comemos|comer la sandía.
c sandía [i]. ←here the child repeats *part* of the adult's utterance but does not add anything new or change the mode of communication.

a perro.
c perro camina|caminar [u]. ←here the child adds new words

a perro.
c {signs dog} [u]. ←here the child changes the mode of communication

C El triángulo [u][z]
A El triángulo [mt][ix][at]
C El triángulo [**i**][z] ← even though the child said this before the adult, it is imitated on this line

C El triángulo [u][z]
A El triángulo [mt][ix][at]
C El triángulo azul [**u**][z] ← because the child added language, it is spontaneous

Even if the adult doesn't say the utterance aloud, if the child imitates their use of AAC, this will be [i].

4. **Elicited [E]:** The child is using spontaneous language in response to an adult communication open prompt, question, or cue. Child utterances in response to any of the following will receive this code:
    a. Open Question ("que quieres?")
    b. Yes/No Question ("quieres la pelota?")
    c. Clarifying question ("que?")
    d. Test Question ("que es esto?")
    e. Time Delay

Examples:
a {holds up two objects}. ← this is a Time Delay
c {grabs} [e].

a diga|decir que quieres|querer.
c plastillina [e].

a {holds up two objects}. ← this is a Time Delay
c carro [e].

Time Delay: A time delay is a nonverbal way of prompting the child to request an object, action or assistance. A Time Delay occurs when an adult uses an expectant look while holding a toy out of reach, waiting to perform an action the child wants (i.e., not opening a box or not winding a toy while looking expectantly at child), or sabotaging a child's routine (i.e. stopping cars from going down the track, putting hand over ball chute, looking at child expectantly or oriented toward the child and waiting for a child to respond).

- A time delay should be overt
- A time delay must begin with the adult having the child's attention

The following are considered time delay strategies:

a. Assistance: creating a situation in which the child needs the adult's help
Examples: Bottles, bags, jars, etc. that the child cannot open; toys the child cannot assemble alone; wind-up toys the child cannot operate
b. Inadequate portions: providing a small amount of a desired material
Examples: Pouring a small amount of water into a tub; putting only a small ball of playdoh on the table; squirting only a tiny amount of paint in the dish
c. Choice Making: the adult holds up two options and waits from the child to communicate (this should be done without any words).
d. Waiting with routine: the adult sets up a routine while modeling the language target, and then waits in the middle of the routine to see if the child will produce the target.
Example: The adult and child pour beans together and the adult says "pour" after each time they pour the beans. The 3rd time, the adult holds the beans up and but does not pour the beans and looks at the child expectantly until he communicates.
e. Waiting with cue: the adult sets up the environment so that the objects cue the child.
Example: The adult holds the shoe up to the baby's foot and looks at the child expectantly until he communicates.

NOTE: Adult {points} are also considered communicative cues when they are pointing for the purpose of gaining the child's attention. If the child's utterance is in response to the adult silently pointing something out to them (as in pointing to a picture in a book during the "dog book" portion of the Language Sample), code [e].

Form:

How the child is communicating.

1. **Word [W]:** The child says a word. A word does not have to be clearly articulated. If the child uses the same sounds for the same object consistently, it is considered a word.
Examples:
c agua [w].
c {child says "gua" for "agua"} agua [w].
C {child points to apple} apple [u]**[w]**.

2. **Gesture [G]:** The child uses a gesture to communicate nonverbally (not a play action). Gestures include reaches, grabs, shaking of the head, head nodding, points, shows, and gives. If the child uses a gesture while vocalizing, code it as a gesture [g]. If the child uses words with a gesture, code it as a word [w].

Examples:
c {child reaches} [g].
c {child points to apple} [g].
C {shakes head, voc}[u][g].

Non-examples:

C {child points to apple} apple [u]**[w]**. ← The child used both a gesture and a word. Code as a word because it is a higher level skill.

Scaling Success additional notes for [g]

Gestures should always be communicative, so if the child is simply reaching without referencing another person at all (e.g., looking at them, vocalizing), then do not code as [g]. Using the adult's hand as tool is *not* coded as [g].

3. **AAC [z]**: AAC stands for augmentative and alternative communication. It may include use of a device, pictures, or sign language to communicate. Idiosyncratic signs (those that the child or family made up but that they use consistently) also count here – the therapist will tell coders what these are.

C {signs more} [z].
C {gives picture to request item} [z].
C {blinks eyes to communicate sleepiness} [z].
C {presses button on iPad to activate a word} [z].

Note: Similar rules apply for determining whether the child is using AAC communicatively as for other codes (see [vu]). Activating symbols on AAC devices is more likely to be communicative when the action is paired with gestures and/or eye contact or when it is related to something in the environment. A rule of thumb is to ask yourself whether the child would make the vocalization if you were not in the room. If the answer is yes, then it is probably *not* communicative. However, err on the side of communicative if you think there is a chance they are communicative.

When the child uses AAC and it is unclear whether it is communicative, but the adult responds contingently using an expansion, transcribe the child line as if it were communicative. Because the adult considered it to be communicative, we will assume it was communicative. Examples:

C el arroz [u][z].
A el arroz está caliente [mt][yx][pt][z].

C la galleta [u][z].
A la comes [mt][nx][pt].

Specifically with speech generating devices, if the child holds the device up to their ear while activating the button (indicating that the purpose is to hear the sound rather than communicate), consider this noncommunicative.

When the child activates symbols with the AAC device that are definitely noncommunicative, transcribe the word(s) inside curly brackets.

These lines should get child single codes [n] or [o] so that the following adult turn can be coded as matched/unmatched accordingly.

Examples of noncommunicative AAC use:
C {blue, red, yellow}[n].
C {A, B, C}[n].
C {el huevo, holding device to ear}[o].

C {hits device and activates several words}[o].

Sometimes children repeat words several times when they use AAC, but they are all part of one utterance. In these cases, simply transcribe the extra repetitions in parentheses up to 2 times.

Examples:
C (la pera la pera) la pera [u][z]. ← Even if the child pushed the button 5 times, you would just need to transcribe in parentheses 2 times.

Linguistic Codes:

Codes about the switching languages, making errors in grammar or word error, adding extra words that don't make sense, and fragmented utterances. These are SALT codes used on both the child and adult utterances. They are mostly coded at the utterance level, and not attached to individual words. However, Code Switch should be attached to each word it applies to. These codes will not apply to all utterances. Only use when one of these things occurs.

1. **Code Switch [CS]:** The child "code switches" aka switches languages. This is coded when a child uses an English word in the CCX or Spanish Language Sample or uses a Spanish word in the English Language Sample. This code should be attached to each word in the specified language.

   Example in CCX or Spanish Language Sample:
   c xx el dog[cs].
   c i[cs] want[cs] more[cs].

   Example in English Language Sample:
   c mira|mirar[cs].
   c quiero|querer[cs] car/s.

2. **Word Order [WO]:** Words or phrases within the utterance are out of order in Standard English. The content (semantics) of the utterance is correct; however, the word order is awkward. NOTE: This only applies to utterances in English.

   Example:
   c and then fall down the boy [wo].

3. **Extra Words [EW]:** The utterance contains extraneous or unnecessary words that, if omitted, would make the utterance syntactically correct.

   Example:
   c la chica diga|decir que la chica ella quiere|querer jugo [ew].

4. **Fragment [F]:** The utterance is lacking a stated subject as a result of segmenting utterances using modified communication units.

   Example:
   c el perro comió|comer
   c y corrió|correr afuera [f].

5. **Word Error [EW:__]:** The utterance contains a word error. The correct word should be included in the brackets.
   NOTE: for child utterances, the article can be missing and this code will not be used.

   Example:
   C la niña [EW: tiene|tener] tengo|tener hambre. ← incorrect verb tense because "la luna" is a 3rd person subject
   C el oso es|ser [EW: esta|estar] adentro. ← using "ser" where they should use "estar"
   C las [EW: los] libros. ←incorrect article

Adult Codes:

Single Codes	***Matched Turn***	***Expansion***	***Target***	***Linguistic Codes***
[n] – no response	[mt] – matched turn	[yx] – expansion	[at] – at target level	[cs] – code switch
[o] – no opportunity	[rt] – related turn	[gx] – word/grammar recast	[pt]- proximal target level	[wo] – word order
[ax] – adult unintelligible	[ut] – unmatched turn	[rx] – intelligibility recast	[nt] – not at target level	[ew] – extra word
[r]- reading	[et] – extra turn	[ex] – extension		[f] – fragment
		[nx] – no expansion		[ew:__] – word error
		[ix] – impossible to expand		[z] – augmented input

Coding Instructions

At the end of each line, you will either insert one Single Code or insert a code from <u>each</u> category (Matched Turn, Expansion, Target). Linguistic codes will be applied when appropriate.

Examples:
a {pours water} agua [mt][ix][at].
c [o].
a ven|venir aquí [ut][ix][nt].

When inserting a code from each category, ALWAYS put the codes in the following order: Matched Turn, Expansion, Target.

Example:
a {points} pásame|pasar+me el plato [mt][nx][at].

*An inserted adult line with the Single Code [n] should always be accompanied by either [nx] or [ix], depending on the adult's ability to expand the child's previous utterance (see **Expansions**).

Adult Single Codes:

7. **No Response [N]:** The adult does not respond to the child's communication within 3 seconds (if on the line of 3 seconds, code [o]). An adult line with this code should be inserted whenever the adult fails to respond to a child utterance within 3 seconds between two child turns. On the inserted line, this code should be accompanied by either [ix] or [nx], depending on the adult's ability to expand the child's previous utterance (see **Expansions**).

Example:
c carro.
a **[n][nx].**
c tren.
If the adult speaks next after failing to respond to a child turn within 3 seconds, insert an adult line after the child line. It is acceptable to have two adult lines in a row if the adult fails to respond to the child's communication before his/her next turn.

Example:
c xx.
a **[n][ix].**
a a qué vamos|ir a jugar [ut][ix][nt]?

8. **No Opportunity [O]:** No opportunity to respond to the child's communication. If the child says multiple utterances in a row without a break of at least 3 seconds, insert adult lines with the code [o] between the child's utterances. If you are unsure about whether or not the adult had an opportunity to respond, code [o]. These adult single codes do *not* require an [ix] or [nx] code.

   Example:
   c dame.
   a [o].
   c carro.

   If another adult in the room interjects between child turns or between the child turn and the next adult turn, and the interjection makes it impossible for the adult to respond to the child within 3 seconds, insert an adult line with the code [o] (regardless of whether the child or the adult speaks next).

   Example:
   c {vocalizes}.
   =therapist talks to parent during parent session
   a [o].
   a limpiamos|limpiar.

9. **Adult unintelligible [AX]:** Adult is unintelligible. The adult says something that is completely or partially unintelligible.

   Example:
   a xxx [ax].
   a es|ser la xx [ax].

   When the adult abandons an utterance, code the whole utterance with [ax].

   Example
   A Okay vamos|ir a dejar [ax]>

10. **Reading [r]:** The adult is reading the book. This code may be combined with the [cs] code if the adult is reading in English. **Note: Generally, this code is only used during the CCX Book (unless they pull out a book during the CCX Play).**

    Examples:
    a {reading} **[r].**
    a {reading} **[r][cs]**.

Matched Turns:

Whether or not the adult's utterance was related and/or contingent to the child's previous utterance.

1. **Matched turn [MT]:** Adult turns that follow a child turn that are contingent and related. The adult utterance can contain questions and/or commands if they are contingent and related in content. Activity-based directions are considered matched. If you are unsure about whether or not the turn was related and/or contingent, code [mt].

   There are two types of child turns that the adult can respond to and get a Matched Turn. One is a child communicative act. Verbal turns, gestures, and vocalizations are considered communicative.

   Example:
   c {gives}.
   a ayúdame|ayudar+me [mt].

   c paleta.
   a tienes|tener una paleta [mt].

   The other child turn that the adult can verbally respond to for a matched turn is a child play act. This is only considered a matched turn when the adult is "mirroring and mapping." Mirroring and mapping is an EMT strategy in which the adult mimics a child play act while adding - or "mapping" - language onto it. This turn must occur directly following the child's play act. The adult can also do the action with the child with his/her hand over the child's hand.

   Example:
   c {jumps} [t].
   a {jumps} brinca|brincar [mt].

2. **Related Turns [RT]:** Adult turns that follow an adult matched within 3 seconds and are directly related to the previous adult turn in content. These turns must have content language and provide additional information. They may follow turns to get the child's attention by saying something like "mira" or used to expand the child's language after taking a turn to repeat it. They can only be in the form of a comment or an activity-related command (only play or book content related questions can be related turns). A related turn cannot follow another related turn. All unmatched turns following a related turn will be coded unmatched even if they are related in content. Unmatched turns following extra turns *cannot* be related turns.

   Examples:
   a mira|mirar [mt].

c [o].
a *las flor/s **[rt]**. ← "mira" was used to get the child's attention to "las flores"

c flor/s [u][z].
a muy bien [mt][nx][nt].
c [o].
a las flor/s [rt][yx][pt].

A No son|ser galleta/s [mt].
c [o].
A son|ser tortilla/s **[rt]**. ←the second turn is to explain what the objects are that are negated in the previous turn. the adult is saying "they're not _____. they're _____"

a la mano [mt].
c [o].
a vamos|ir a limpiar **[rt]**. ←in the first turn the adult is asking for the child's hands, the second turn introducing an activitiy (washing) that they'll do with them

c mariposa.
a mariposa [mt].
c [o].
a la mariposa vuela|volar **[rt]**. ← the first turn the adult is repeating what the child said, and then they're taking another turn to do a language expansion*

* Note: if the first time the adult said "mariposa" in this example was more of a maze (like she was just thinking out loud to herself), then it would be transcribed and coded:
C mariposa.
A (mariposa) la mariposa vuela|volar [mt][yx].

a la mermaid [mt].
c [o].
a una serena **[rt]**. ←the second turn is related because they are just translating their previous turn

a y a ti cual te gustas|gustar?
c a mi me gusta|gustar una paleta de chocolate.
a de chocolate que rica [mt].
c [o].
a a mi me gustan|gustar las paleta/s de aguacate **[rt]**. ←they are on the same topic, adding new information

Non-examples:

c mariposa.
a mariposa [mt][nx].

c [n]. ← The adult waited long enough before expanding that the child could have responded so it is an extra turn rather than related turn.
a la mariposa vuela|volar **[et][ix]**.

C [n].
A cortamos|cortar [et][ix][at][z].
C [o].
A el ají **[ut]**[ix][at]. ← [rt] can only follow matched turns, not extra turns

3. **Unmatched turns [UT]:**
   a. Consecutive adult turns that are not preceded by child lines.
      Example:
      a quieres|querer tomar otra o ya [ut]?
      c [o].
      a o quieres|querer jugar con tus animal/s [ut]?

   b. Adult turns that are in response to a child utterance but are <u>not related</u> or contingent. *Note*: this ***<u>must</u>*** be overt.
      Example:
      c quiero|quere la pelota.
      a límpiate|limpiar+te las manitas|mano/s [ut].

   c. Adult turns that are not within 5 seconds of the previous child utterance. *these should be preceded by an inserted adult line with the codes [n][ix] or [n][nx], depending on the adult's ability to expand the child's previous utterance. If the adult is trying to find toys to mirror/map, setting up the environment, or trying to discern what language the child used, but then expands or matches the child's previous turn, code [mt].

4. **Extra turns [ET]:** Appropriate unmatched adult turns taken after an interval of **<u>3</u>** seconds in which the child did not take either a play or verbal turn.

   To count as an Extra Turn [et], the adult must:
   a) Be doing a Choice Time Delay
      OR
   b) Use a Target or Proximal Target (see **Adult Targets**) and be talking about something related to current play

   Example:
   a ponemos|poner.
   =5 seconds pass
   a {points} wow [ut]!

   Example:
   c {in} [t].

a {in} in.
=3 seconds pass
a {points} carro [et].

a temenos|tener comida.
= 3 seconds pass
a {holds up choice} [et].

Expansion:

Whether or not the adult expands the child's communication by adding words. An expansion must match the intent of the child. In an expansion, the adult adds words to the child's previous utterance without changing the child's function. The adult must EITHER add a word, replace a non-specific word or linguistic other with a content word, OR correct a grammatical or contextual error made by the child. They cannot both add and replace words.

Most expansions will happen in a Matched Turn directly following a child turn, but they may also happen in a Related Turn following a Matched Turn in response to the child. They can only happen in the 1-2 turns responding to the child.

NOTE: All adult turns during a Question Sequence (see Question Strategies) are coded [ix].

1. **Expansion [yx]:** The adult expands the child's word(s). The adult must repeat every content word in the child's previous utterance to expand. They do not have to repeat linguistic others. If the child's utterance is at target level, the adult can expand by repeating the child's utterance and adding 1-3 words. This code only applies to expansions in which the adult does not translate any of the words into another language.

    a. **Repeating what the child said and adding 1-3 words depending on the child's content word(s).**

Examples	Non-Examples
c ma mira|mirar [u][w]. a mira|mirar está|auxestar jugando|jugar [mt]**[yx]**[at].	C (es|ser) es|ser [u][z]. A es|ser hora de tu clase [mt][ix][pt]. "es" is likely noncommunicative because it's not something a child or adult would typically say, so it should be coded [ix].
c agua. a (agua) el pez en el agua **[rt][yx]**[pt]. In this example, the first time the adult repeated "agua" it was a maze.	c agua [u][w]. a agua [mt][nx][nt]. c **[n]**. ← adult waited too long before expanding a el pez en el agua [**et][ix**][pt].

c agua [u][w]. a agua [mt][**nx**][nt]. c [o]. a el pez en el agua **[rt][yx]**[pt]. In this example, the adult responded to the child first by repeating the word and then expanding in the related turn.	
C No no [u][z]. A No hay|haber arroz [mt][**yx**][pt].	
C Rico [u][z]. A Muy bien [mt][nx][nt]. c [o]. A Sí, están|auxestar ricos tus taco/s [rt][yx][pt].	
C Hermano [u][z] A el hermano está|estar en la escuela [mt][yx][pt].	

b. Conjugating the verb differently when the child says a complete sentence.

Examples	Non-Examples
A{points} qué hace|hacer la mama? C ella está|estar refrescándose|refrescar+se con la paleta. A se[x] refresca|refrescar con la paleta **[yx]**.	

c. Adding the article

Examples	Non-Examples
c hormiga. a la hormiga **[yx].**	
c bebe. a (bebe) la bebe **[rt][yx]**[at].	C bebé. A bebé [mt][nx][nt]. C **[n]**. A la bebé **[et][ix]**[at].

2. **Word/Grammar Recast [GX]:** The adult replaces the child's nonspecific or incorrect word with the specific/correct word or corrects a grammatical error the child made.

    a. **Correcting a grammatical, contextual error, or article error.**

    c la caballo.
    a el caballo **[gx].**

    b. **Replacing a pronoun with a specific noun**

    c esto.
    a el bloque amarillo **[gx].**

    c. **Recasting an incorrectly conjugated verb**

    c la niña quieres|querer [EW:quiere] una paleta.
    a la niña quiere|querer una paleta **[gx]**.

    d. **Replacing a non-specific word or linguistic other with a content word.**

    c uhoh
    a se||[x] cayó|caer **[gx]**.

    c {points} mira|mirar.
    a {points} la jirafa **[gx]**. ←replaced the overused "mira" with what the child is commenting about

    C Wow[nc] [u][w][be].
    A El globo [mt][gx][at].

    NOTE: This does not apply to "sí" when the child is answering a question. If the child says "sí" the adult must repeat it and expand for it to count as an expansion

    a resblan|resbalar?
    c sí.
    a resbalar **[nx]**.

3. **Intelligibility Recast [RX]:** The adult models the appropriate speech sounds for the word(s) the child approximated but was not able to correctly say. You will have to listen for these, as they will not be transcribed differently because child approximations are transcribed as the words they are attemtping to say. It will be apparent when the child is missing the initial/final consonant of a word and the adult repeats it while emphasizing the missing/incorrect sound.

    c bloque (sounds like "loque")
    a bloque **[rx]**. (emphasizing the "b" sound at the beginning)

4. **Extension [EX]:** In response to a child sentence (or verb with implied pronoun in Spanish), the adult adds information to the topic, offers a new perspective provides a different way to

conjugate the verb used by the child, or adds decontextualized talk about the subject. This may include a contrastive response to what the child said or other additional information. Must be in the form of a statement.

a y a ti cual te gustas|gustar?
c a mi me gusta|gustar como[EW] una paleta de chocolate.
a a mi me gusta|gustar las paleta/s de aguacate **[ex]**. ← contrastive response

5. **No expansion [NX]:** The adult could be attempting to expand the child's previous utterance but changes the child's communicative function, adds too many words, OR does not repeat all of the content words in the child's utterance. If the adult only adds a linguistic other(s) to the child's previous utterance, it is not an expansion [nx].

   All of the following are not considered Expansions:
   1. Changing the intent or not repeating content the words the child said.
      c perro.
      a entra en la casa **[nx].**

   2. Taking a turn above the child's target level when they have not said a target.
      a {points} ello/s están|estar abajo|| **[nx].**

   3. Responses to child questions.
      c que es?
      a {points} sí es|ser la estrella **[nx].**

   4. Adding more than 3 words to the child's previous utterance.
      c taza.
      a una taza para que tomes|tomar café y jugo **[nx].**

More [nx] examples:

C Wow[nc] [u][w][be].
A Bravo ss02 [mt][nx][nt]. ← The adult could have replaced "wow" with a content word for [gx]

5. **Impossible to expand [IX]:** It is impossible for the adult to expand the child's previous utterance.

The following are considered impossible to expand [IX]:
- Consecutive adult turns (no child turn to expand) EXCEPT related turns*
- Turns that follow a child vocalization [vu], unintelligible [cx]**, action [t] or gesture [g]
- Turns within a question sequence (see Question Strategies for details)
- Turns that follow a child English turns (full or partial)

*The adult can use a related turn to expand by first repeating the child's utterance and then taking a second related turn to expand. Otherwise, related turns are coded [ix]
**Only complete unintelligible turns are [ix]. If the child's turn is partially intelligible, the adult may expand the intelligible words

Examples:
c {vocalizes}.
a pelota **[ix].**

c xxx [cx].
a el perro **[ix].**

c {sleeps} [t].
a {sleeps} duermen|dormir **[ix].**

c {points} [u][g].
a el gato **[ix].**

a qué hace|hacer la mamá **[ix]**?
c phone.
a habla|hablar por teléfono **[ix]**.
c mamá mira|mirar.
a < {points} qué hace|hacer la mamá> **[ix]**?
c telefono.
a habla|hablar por telefono. ← **[yx]***

C (es|ser) es|ser [u][z].
A es|ser hora de tu clase [mt][ix][pt].

"es" is likely noncommunicative because it's not something a child or adult would typically say, so it should be coded [ix].

***The final turn ending the Question Sequence may be coded [yx] if the child says the prompted target or part of the prompted target and the adult properly expands. If the child does not say the prompted target (full or partial) and the adult repeats the prompted target, code [ix].**

a {points} qué hacen|hacer los perro/s **[ix]**?
c arriba abajo.
a suben|subir la montaña **[ix]**.
c arriba abajo.
a {points} qué hacen|hacer los perro/s **[ix]**?
c arriba abajo.
a suben|subir la montaña **[ix]**.
c arriba abajo.
a {points} qué hacen|hacer los perro/s **[ix]**?
-22:12
c arriba abajo.
a suben|subir la montaña. ← **[ix]**

C {voc}[vu].
A Mira|mirar abrimos|abrir [mt][ix][at].

c [o].
A Abrimos|abrir [rt][ix][at]. ← both the matched turn and the related turn refer back to the child {voc}, and so neither one could have been an expansion.

Adult Targets:

The level of language in the adult's utterance in relation to the child's tier level of language.

A "tier level" is the targeted amount of language for the child to be using to communicate. Tier levels are determined by the child's language sample data. Children are identified as being at a Tier 1, 2 or 3 level depending on his/her current language level. During the project period children will likely shift tier levels. Determination of tier levels will be completed at each time point by coders following the tier determinations guidelines. See Tier Table below.

For each tier level, there are particular types of words or combinations of words that are considered ideal for that level of language. If the adult's utterance is "at target" it means that they are using the correct types and/or combination of words. If the adult's utterance is a "proximal target" it means that they are using the correct types and/or combinations of words at one tier level above the child's target level. The "at target" level is what we expect the child could imitate and the "proximal target" level is within the child's zone of proximal development. Anything below or outside the specific criteria for the "at target" level or above the "proximal target" level is considered to "not target."

See the **Table of Tier Levels and Definitions** at the end of the coding manual for more details about tier levels.

Note: The target level is always coded based on the type of words and/or word combinations, regardless of the relationship between what the adult says and what the child said in the preceding turn. Even if the adult expands a child utterance correctly (See **Expansion**), code the Targets based on the type of words and/or word combinations.

Exceptions to typical rules for coding target:

- The following utterances should be coded [at], even though they technically meet [pt] criteria:
  - A ayúdame [at]. ← if the adult is modeling what the child could say. However, code [nt] if the adult is actually telling the child to help.
  - A me gusta [at].
  - A se cayó [at].
  - A ya terminé [at].
  - A se acabó [at].
- The following should be coded [nt] like other social phrases, even though it technically meets [pt] criteria:
  - A te amo [nt].
- **In milieu episodes, model prompts (i.e., 'say ball'/ 'di la pelota') are considered at target level if the adult is prompting the child's target.**
  - **A di abre [at].**
  - **A di el helado [at].**

1. **At Target [at]:** At target for the child's tier level. The utterance must be grammatically correct, include the correct article indicating number and gender (for Spanish nouns), and must be in the form of a statement (not a command or a question).

   Tier 1 Spanish Targets for the adult include:

   - **Article + Common Singular Noun**
     (alone or used in a simple sentence, such as "es..." "aqui esta..." "este es...")
     A una paleta **[at]**.
     A es un melón **[at]**.
     A aquí esta|estar el bebe **[at]**.
     A un pedazo de pizza **[at]**.

   - **Common present tense inflected verb** (with prounoun or implied pronoun)
     A yo quiero|querer **[at]**.
     A comemos|comer **[at]**.

   - **Common present progressive verb*** (with pronoun or implied pronoun in Spanish)
     A estan|auxestar jugando|jugar **[at]**.
     A anda buscando **[at]**. ← this is not technically present progressive, but the construction is similar with an auxiliary verb (andar) and a main verb (buscar)
     A va buscando **[at]**. ← same here

   - **Modifier**
     A caliente [at].
     A está caliente [at].
     A es rojo [at].
   - Modifiers – can also be at target if they are specific, related to the play action and include "que"
     - Que rico [at]

   - **Location words**
     A adentro [at].
     A afuera [at].

*Note: Forms of *ir* (vamos, voy, va) used with an infinitive (e.g. "vamos a jugar") count as one verb phrase and are treated as targets for Tier 1 if they are used alone or with a pronoun.

A vamos|ir a comer **[at]**.
A voy|ir a leer **[at]**.

These utterances coded [at] for Tier 1 may start with the conjunctions "y" or "o" or include the simple adverb "ya."

A ya puedes|poder **[at]**.
A y la niña **[at]**.
A and the tiger **[at]**.

If a conjunction is used in the middle of an utterance to connect two concepts, it is considered Not a Target [nt] for Tier 1.

A el grande y el pequeño **[nt]**.
A el gato y el perro **[nt]**.
A la naranja con el plátano [et][ix][nt]. ← "con" isn't exactly a conjunction but it is functioning similarly in this case.

Uninflected (infinitive) verbs are [nt].
A guardar [nt].
A a comer [nt].

Tier 1 English Targets for the adult include:

- **Nouns (**alone or with article)
  A the ball **[at]**.
  A baby **[at]**.

Tier 2 Spanish Targets for the adult include:

- **Article + Obscure**, **specific** and **elaborated Noun**
  (alone or used in a simple sentence with "Es..." or "Este es...")
  A el osito|oso **[at]**.
  A es una sirena **[at]**.

- **Obscure/uncommon verb use**
  A esta|auxestar patinando **[at]**.

- **Plural Nouns with the correct article**
  A los gato/s **[at]**.
  A las paleta/s **[at]**.

- **Article + Noun + Present / Present Progressive Verb**
  A la familia esta|auxestar comiendo|comer **[at]**.
  A El perro corre|correr **[at]**.

- **Negation + verb used with pronoun (or implied pronoun)**
  A No comemos|comer nada **[at]**.

- **Reflexive verb with Pronoun** (or implied pronoun)
  A lo encontró|encontrar **[at]**.
  A abrelo|abrir+lo **[at]**.

- **Verb + Direct Object with Pronoun** (or implied pronoun)
  A quiero|querer una naranja **[at]**.
  A yo tengo|tener la pelota **[at]**.

- **Preterit used with pronoun** (or implied pronoun)
  A se cayó|caer **[at]**.

- **Noun + Copula + State**
  A el perro esta|estar mojado **[at]**.

Tier 2 English Targets for the adult include:

- **Simple Active Declarative Sentence** (in one of these forms)**:**
  - **Pronoun/Noun + Intransitive Verb** (noun must include article)
    A the boy is driving **[at]**.
    A it fell **[at]**.

  - **Pronoun/Noun + Transitive Verb + Direct Object** (noun must include article)
    A the baby wants a bottle **[at]**.
    A she is eating pizza **[at]**.

  - **Pronoun/Noun + State or Location** (noun must include article)
    A the horse is in the barn **[at]**.
    A it's on top **[at]**.

- **Modifier + Noun phrase**
  (with or without article, alone or in a sentence with "it's" or "that's")
  A the blue cup **[at]**.
  A it's your turn **[at]**.

2. **Proximal Target [pt]:** Above the child's tier level, but within a proximal range of 1-2 added concepts above. The utterance must be grammatically correct, include the correct article indicating number and gender (for Spanish nouns), and must be in the form of a statement. The utterance cannot contain more than 2 added concepts.

Tier 1 Spanish Proximal Targets include:

- **Article + noun + present/ present progressive verb**
  (note that word order is flexible in Spanish)
  A el perro esta|auxestar corriendo|correr **[pt]**.

- **Reflexive verb** (with pronoun or implied pronoun)
  A se acabó|acabar **[pt]**.

- **Preterit or other tense** (with pronoun or implied pronoun)
  A caminaba|caminar **[pt]**.
  A caminó|comer el oso la paleta **[pt]**.
  A la gente caminará|caminar después **[pt]**.
  A ha caminado|caminar **[pt]**.
  A habia caminado|caminar **[pt]**.

- **Verb + direct object in any tense (may include pronoun as subject/object)**
  A lo encontró|encontrar **[pt]**.
  A enjuagamos|enjuagar los plato/s [pt].
  A Vamos|ir a meter+lo aquí mira|mirar [et][ix][**pt**]
  A la oveja hace <muuu> [pt].

- **Subject + Verb + Direct Object (with common nouns and verbs)**
  A el bebé tiene un vaso **[pt]**.

- **Negation + verb** (with pronoun or implied pronoun)
  A no tenemos|tener un vaso **[pt]**.

- **Noun used with possessive pronoun**
  A mi plato **[pt]**.
  A tu paleta **[pt]**.

- **Plural nouns**
  A las burbujas [pt].
  A Seis lados [pt].

- **Elaborated nouns**
  A el perrito|perro [pt].

- **Article + noun + modifier**
  A el color rojo [pt].
  A la torre grande [pt].
  A el corazón de la niña [pt]. ← in this case "de la niña" is a phrase (instead of a word) modifying the noun
  A un circulo en el cuaderno [pt]

- **Common verb + common verb** (This is technically a complex form, but when verbs like querer are followed by another verb, it is a common form for young children)

  A quiero|querer leer [pt].

- **Special cases that are still [pt]**

  A El pollo lo comes [pt]. ← If the adult says all this together as if it were a single utterance, transcribe on one line and code [pt].

  A que rico el arroz [pt].

Tier 1 English Proximal Targets include:

- **Simple Active Declarative Sentence** (in one of these forms)**:**
  - **Pronoun/Noun + Intransitive Verb** (noun must include article)
    A the ball is rolling **[pt].**
    A it broke **[pt]**.

- **Pronoun/Noun + Tranisitive Verb + Direct Object** (noun must include article)
  A i'm making a cake **[pt]**.
  A the bear is eating fruit **[pt]**.

- **Pronoun/Noun + State or Location** (noun must include article)
  A he's inside **[pt]**.
  A the door is open **[pt]**.

- **Modifier + Noun phrase**
  (with or without article, alone or in a sentence with "it's" or "that's")
  A two blocks **[pt]**.
  A the big bowl **[pt]**.

Tier 2 Spanish Proximal Targets include:

- **Noun phrases with possessive form**
  A el perro del niño **[pt]**.

- **Simple Sentences with verb tenses beyond Present, Present Progressive & Preterit**
  A Ella caminaba|caminar ayer **[pt]**.
  A ¡Camine|Caminar niña!**[at]**.

- **Multiple modifiers**
  A la mariposa es|ser pequeña y azul **[pt]**.
  A tengo|tener una manzana verde y una manzana roja **[pt]**.

- **Subject + Verb* + Direct Object** (with uncommon verb or noun use)
  *verb must be in the Present, Present Progressive or Preterit tense
  A el hombre toca|tocar un acordeón **[pt]**.
  A los niño/s buscaban|buscar una mochila azul **[pt]**.

- **Subject + Verb* + Prepositional Phrase**
  *verb must be in the Present, Present Progressive or Preterit tense
  A El oso camina|caminar por la playa **[pt]**.
  A El pájaro azul está en la ventana **[pt]**.

Tier 2 English Proximal Targets include:

- **Complex Active Declarative Sentences (up to 5 content words) that include:**
  - **Articles + Compound nouns + an Intransitive Verb**
    A the boy and the girl are playing **[pt]**.

  - **Articles + Compound nouns + Transitive Verb + Object**
    A the dog and the cat are eating dinner **[pt]**.

- **Pronoun/Noun + Compound verbs** (noun must include article)
  A the baby is sitting and waiting **[pt]**.

- **Two verb phrases**
  A i'm putting the pizza in and closing the door **[pt]**.

- **An infinitive verb phrase**
  A the animals wants to eat **[pt]**.
  A they're going to go **[pt]**.

- **Catenative + Verb phrase**
  A the cars are gonna go down the ramp **[pt]**.

3. **Not A Target [nt]:** Not a target or proximal target at the child's tier level. These can include using too many words or not using enough words, using only a lingustic other / social phrase, nonspecific words, asking a question, giving a non-activity related command, using non-content language, or saying grammatically incorrect utterances.

A damelo|dar+me+lo **[nt]**. ← command
A give it to me **[nt]**.
A quieres|querer pizza **[nt]**? ← question
A do you want pizza **[nt]**?
A Sí es|ser allí **[nt]**. ← too general (nonspecific)
A yes, it's there **[nt]**.
A el carro no camina|caminar si no tiene|tener gas **[nt]**. ← too long
A the car can't go if it doesn't have gas **[nt]**.
A uhoh **[nt]**. ← linguistic other
A buenas noches **[nt]**. ← social phrase
A te amo [nt]. ← social phrase

A muy bien [nt]. ← social phrase

A a guardar [nt]. ← uninflected verb (no subject)

A comer [nt]. ← uninflected verb (no subject)

However, if the adult says an inflected verb (e.g., comemos) while modeling an uninflected verb with AAC (e.g., comer), transcribe and code that as inflected.

A (ten|tener ten|tener) ten|tener mira|mirar [ut][ix][nt]. ← command, related to play, but only contains nonspecific language

A no, cuidado [ut][ix][nt]. ← command

Note: Anything that is a target for Tier 1, is [nt] for Tier 2 because it is too low.

Linguistic Codes:

Codes about the switching languages, making errors in grammar or word error, adding extra words that don't make sense, and fragmented utterances. These are SALT codes used on both the child and adult utterances. These are mostly coded at the utterance level, and not attached to individual words. However, Code Switch should be attached to each word it applies to. These codes will not apply to all utterances. Only use when one of these things occurs.

1. **Code Switch [CS]:** The adult "code switches" aka switches languages. This code is used on every English or Spanish word the adult or child uses, depending on the established language context of the interaction. In the CCX the primary language will always be Spanish, so all English words will be coded [cs] on each English word. It must be attached directly to each English word with no space in between.

   Example:
   a viste|ver el tent[cs]?
   a i[cs] don't[cs] know[cs].

2. **Word Order [WO]:** Words or phrases within the utterance are out of order in Standard English. The content (semantics) of the utterance is correct; however, the word order is awkward. NOTE: This only applies to utterances in English.

   Example:
   a and then fall down the boy [wo].

3. **Extra Words [EW]:** The utterance contains extraneous or unnecessary words that, if omitted, would make the utterance syntactically correct.

   Example:
   a la chica diga|decir que la chica ella quiere|querer jugo [ew].

4. **Fragment [F]:** The utterance is lacking a stated subject as a result of segmenting utterances using modified communication units.

   Example:
   a el perro comió|comer
   a y corrió|correr afuera [f].

5. **Word Error [EW:__]:** The utterance contains a word error. The correct word should be included in the brackets.
   Example: a la luna [EW: tiene|tener] tengo|tener xx.
   c los niño/s [EW:hacen|hacer] haciendo|hacer nuevos amigo/s.

6. **Augmented input [z]:** The adult used AAC (i.e., pushed a button on the iPad) along with their verbal utterance. AAC stands for augmentative and alternative communication. It may include use of a device, pictures, or sign language to communicate. The adult should use the AAC just before, at

the same time, or just after they say the utterance. What the adult says using AAC should match all or part of what they say verbally.

Examples:

A el carro [mt][ix][at][z]. ← the adult said “el carro” and activated the “carro” symbol on the iPad.

A comemos el helado [mt][yx][pt][z]. ← the adult said “comemos el helado” and only activated “comemos” on the iPad.

Time Delay Scoring (Non-Verbal Prompting)

Time Delay: A time delay is a nonverbal way of prompting the child to request an object, action or assistance. A Time Delay occurs when an adult uses an expectant look while holding a toy out of reach, waiting to perform an action the child wants (i.e., not opening a box or not winding a toy while looking expectantly at child), or pausing within an established play routine (holding a block above the blocks they've been stacking).

- A time delay should be overt
- A time delay must begin with the adult having the child's attention
- A time delay should end with giving the child request object/action and labeling with a target
- A time delay should be abandoned if the child is not interested

The following are considered time delay strategies:

a. Assistance: creating a situation in which the child needs the adult's help
   Examples: Bottles, bags, jars, etc. that the child cannot open; toys the child cannot assemble alone; wind-up toys the child cannot operate
b. Inadequate portions: providing a small amount of a desired material
   Examples: Pouring a small amount of water into a tub; putting only a small ball of playdoh on the table; squirting only a tiny amount of paint in the dish
c. Choice Making: the adult holds up two options and waits from the child to communicate (this should be done without any words).
d. Waiting with routine: the adult sets up a routine modeling the target, and then waits to see if the child produces the target.
   Example: The adult and child pour beans together and the adult says "pour" after each time they pour the beans. The 3rd time, the adult holds the beans up and but does not pour the beans and looks at the child expectantly until he communicates/requests.
e. Waiting with cue: the adult sets up the environment so that the objects cue the child.
   Example: The adult holds the shoe up to the baby's foot and looks at the child expectantly until he communicates/requests.

Each TD episode is scored, depending on how the episode is carried out by the adult. This score represents the quality and correctness of the episode.

Time Delay Scoring

Time Delay scores go on a separate line in the transcript. When scoring a time delay, insert a line on the transcript after the last adult utterance involved in the time delay (e.g. labeling the object, expanding what the child said).
Example:

Tier 1
a {holds up choice}.
c {grabs}.
a {gives} la pelota [at].
+[td3] ← the adult showed the choice, waited for a request, and gave while labeling with a target

Tier 2
a {gives child a closed jar}.
c {gives}.
a abrelo|abrir+lo [at].
+[td3] ← the adult gave an object the child would need assistance with, waited, and then performed the action while saying a target

Tier 1
a {shows choice}.
c esto {points}.
a {gives} ok [nt].
+[td1] ←the adult does not label the object with a target

Tier 2
a {holds block above stack, waiting to put it on}.
c pon|poner el bloque {pushes hand}.
a {puts on block, says nothing}.
+[td1] ←the child said a target and the adult didn't repeat or expand

a {takes car from child and holds over ramp}.
c {grabs} es|ser mio.
a {gives} es|ser tu carro.
+[td0] ←time delay is unnatural and disrupts play

a {shows choice}.
c {continues playing uninterested in choice}.
a {puts down choice and resumes playing}.
+[tli] ←the child wasn't interested and the adult appropriately abandoned

Time Delay Scoring Guidelines
Outstanding Performance **[td3]**
The adult demonstrates a high quality Time Delay. The adult must: 1. Start the Time Delay naturally so that it does not disrupt play. 2. Wait for a clear request from the child before giving the object/action. 3. Give the requested object/action at the end of the Time Delay. 4. Label the object/action with a language target within one second of giving it. 5. CHOICE ONLY – present two objects that have distinctly different language targets at the child's target level.
Not Great Teaching **[td2]**
The adult demonstrates a Time Delay with one of the following issues: 1. Does not wait for a clear request (accepts {look} only) – EXCEPT CHOICE. 2. The adult uses a proximal target (instead of a target) after giving the child the object/action.
Confusing to the Child **[td1]**
The adult demonstrates a Time Delay with one of the following issues: 1. The adult does not label the requested object/action with a language target OR does not repeat/expand when the child requests using a language target. 2. The adult has to recruit the child's attention (e.g., calling their name) before delivering the TD. 3. CHOICE – the adult holds the objects within the child's reach so they can grab them rather than requiring the child to communicate by reaching or pointing. 4. CHOICE ONLY – does not present two objects that have distinctly different language targets at the child's target level.
Punishing to the Child **[td0]**
The adult demonstrates a Time Delay with one of the following issues: 1. The time delay is NOT natural and interrupts play. 2. The adult does not give the requested object/action to the child at the end of the Time Delay.
Child is Not Interested **[tli]**
The child is not interested in the object/action and the adult abandons the Time Delay appropriately by not giving the child the object/action. The adult has to have started the TD appropriately (i.e., at a natural time, without recruiting the child's attention, two objects with different targets labels [for choice], etc.) to get this code. If it violates any of those criteria, code with a score, regardless of the child's interest.

Outstanding Performance [td3]

1. **Start the Time Delay naturally so that it does not disrupt play.** The adult should naturally have control over any involved object(s) before the beginning the time delay, and should not disrupt the play interactions to begin the time delay.

2. **Wait for a clear request from the child before giving the object/action.** The adult must wait for the child to request. Requests are child-specific; some children must make a verbal request while other, more subtle requests might just touch the adult's hand. If in doubt on the status of the request, give the adult the benefit of the doubt and assume the child is requesting. If the child does not request, the adult should abandon the episode without giving the object/action.
   The child must request using words (verbal or AAC) and/or a communicative gesture for the adult to receive a **[td3]**.

3. **Give the requested object/action at the end of the Time Delay.** If the child requests the object/action, the adult should give it to them. If the child requests the object/action and the adult gives it to them, score **[td3]**.

4. **Label the object/action with a language target within one second of giving it.** If the child requests the object/action, the adult must end the episode by giving the object/action and labeling it within one second. The words must be based on how the child responds to the time delay. Follow the flowchart below to determine how the adult should respond at the end of the episode.

5. **CHOICE ONLY – Present two objects that have distinctly different language targets at the child's target level.** When presenting a choice between two objects, the adult should do so with two specific and different language targets in mind. If the objects are too similar, it will be confusing for the child to (a) make a choice and (b) associate the objects with words.
   For example, if the child has 1-word language targets, the adult should not present a choice between two cars of different colors, because colors are not 1-word language targets, so if the adult wants to associate the objects with 1-word language targets, they are essentially presenting a choice between "car" or "car." This is confusing for the child.

Not Great Teaching [td2]

1. **Does not wait for a clear request (accepts {look} only) – EXCEPT CHOICE.** If the child does not clearly request the object/action with words or a gesture and the adult gives the object/action, score **[td2].**

2. **Gives the requested object/action before using a language target.** The adult should maintain control of the object until they are ending the Time Delay. If the adult loses control of the object (or objects involved in action) before they end the Time Delay, in such a way that the child gains control and the adult then labels the object, score **[td2]**.

Confusing to the Child [td1]

1. **The adult does not label the requested object/action with a language target.** The adult must end the Time Delay by modeling target language.

If the child does not use a language target when requesting, and the adult does not model a language target, score **[td1]**.
If the child requests using a target and the adult does not expand or repeat the target, score **[td1]**.

2. **CHOICE ONLY - Does not wait for a clear child request (accepts {look} only).** If the child does not clearly request with words or a gesture and the adult gives one or both of the objects, score **[td1]**.

3. **CHOICE ONLY – does not present two objects that have distinctly different language targets at the child's target level.** When presenting a choice between two objects, the adult should do so with two specific and different language targets in mind.
If the adult presents a choice TD with two indistinct objects, score **[td1]**.

Punishing to the Child [td0]

1. **The time delay is NOT natural and interrupts play.** The adult should naturally have control over any involved object(s) before the beginning the time delay, and should not disrupt the play interactions to begin the time delay
If the adult takes toys away from the child before beginning the time delay, either to use the toys in the time delay or to gain the child's full attention, this is considered unnatural – score **[td0].**
If, while the child is playing, the adult clears the table of all toys and holds up two choices, this is considered unnatural – score **[td0]**

2. **The adult does not give the requested object/action to the child at the end of the Time Delay.**
If the child requests the object/action, the adult should give it to them.
If the child requests the object/action and the adult does not give it to them, score **[td0].**

Child is Not Interested [tli]

If the child is not interested in the object/action and the adult abandons the TD correctly by not giving the object/action, score as a **[tli]**.

Question Strategies

As part of the Book Sharing intervention, the adult should ask specific questions, depending on the child's level of language, directly related to content in the book. The adult must use a particular sequence when asking these questions to execute the strategy correctly and receive a score of "Outstanding Performance."

To be coded as a questioning episode, the question has to demand an expressive response, not a simply a point or gesture. Yes/no questions do not get coded for questioning.

Generally, the question "episodes" should follow this sequence:

Question → Child Response → Adult Model → Question → Child Response → Adult Model → Question → Child Response → Adult Model/Expansion

If the child correctly answers the question the first time, the adult does not need to model or ask the question again (which is why that part is highlighted grey). They should just expand the child's response and move on. However, if the child does not correctly answer the question the first time, the adult should model the correct answer, and then ask the question again. If the child answers the question correctly the second time, the adult should expand the child's response by adding language. If the child does not answer the question correctly the second time, the adult should model the correct answer and ask the question again. If the child does not answer the question correctly the third time, the adult should model the response again and move on.

If the child loses interest at any point, the adult should abandon the episode.

The book reading questions and target responses vary in complexity depending on the child's language level. They are split up into three tiers. See the table below for descriptions and examples for each tier.

NOTE: Only score questions that are related to the content in the book. If the adult is asking a question about a person or thing happening in the room outside of the book, do not score. If the adult is asking a question for attention such as "viste?" do not score.

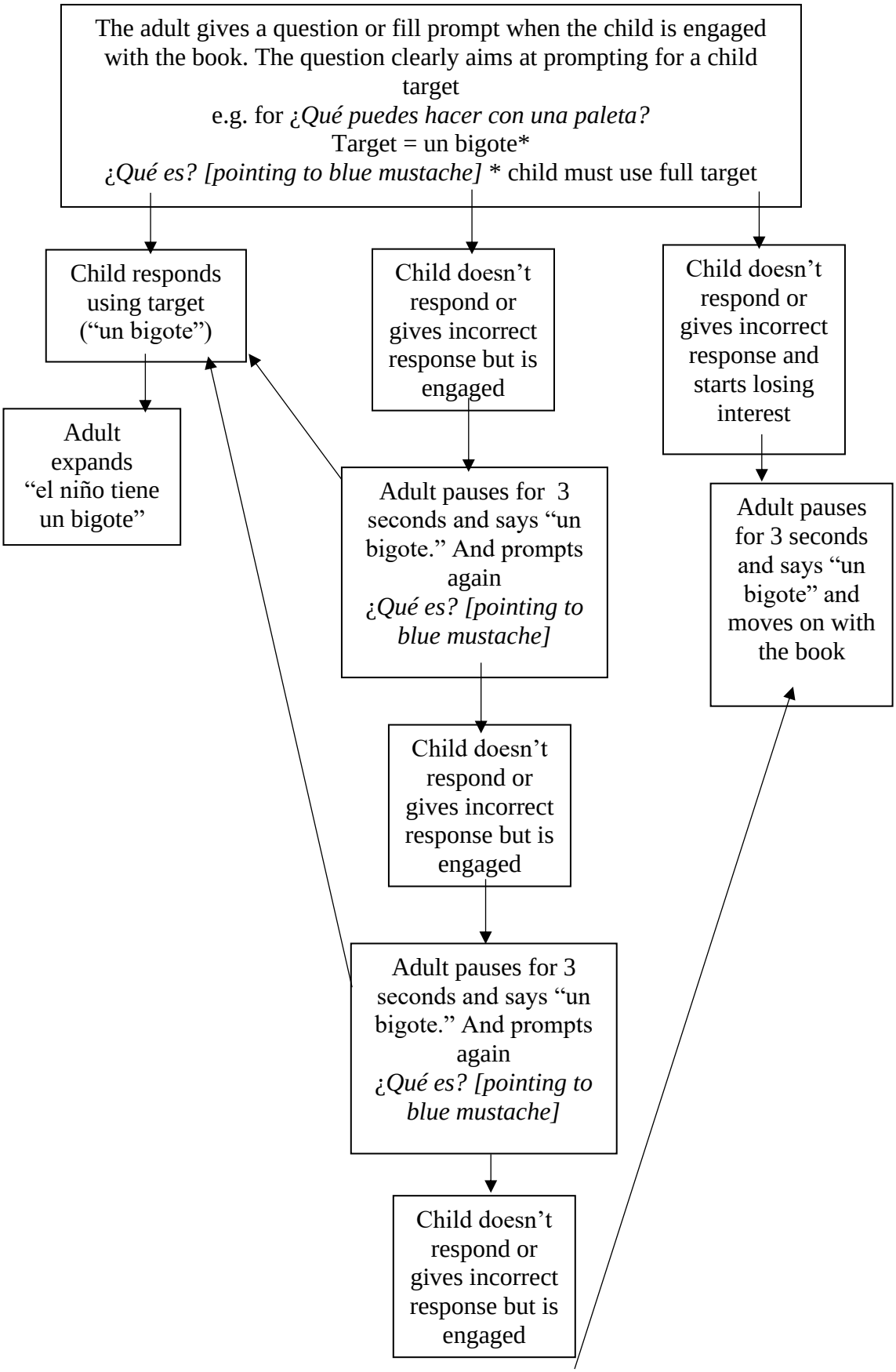
a {points} qué es|ser?
c x [cx].
a la cobija.
+[q1] ←adult only asked the question once and then finished the episode without the child saying the target

Tier 1
a {points} qué hacen|hacer los niño/s?
c x [cx].
a están|estar cantando|cantar [at].
c x [cx].

a qué hacen|hacer los niño/s?
c x [cx].
a {points} están|estar cantando|cantar [at].
c [o].
a qué hacen|hacer los niño/s?
c {sings} xx [cx].
a están|estar cantando|cantar [at].
+[q3] ←the adult went through 3 questions, giving the target each time

Questions Scoring Guidelines
Outstanding Performance **[q3]**
The adult demonstrates a high quality question prompt. The adult must: 1. Have the child's interest/ engagement 2. Say the correct prompt/ question 3. Gives the child time to respond 4. If the child does not respond with the target, the parent follows through with the correct response 5. If the child uses the target, the adult ends with an expansion (YX only, not LX)
Not Great Teaching **[q2]**
The adult demonstrates a question with the following issue: 1. Directs the child's attention without it impacting engagement 2. Question is slightly off, but the answer still makes sense / stays the same 3. The adult repeats the child's target response at the end of an episode instead of expanding the child's target response.
Confusing to the Child **[q1]**
The adult demonstrates a question with one of the following issues: 1. The adult asks an incorrect question/ does not prompt for correct target 2. Does not give the child enough time to answer 3. Does not follow the correct sequence 4. Starts a sequence or continues a sequence when the child is not engaged in the book (if they abandon correctly, score [qli])
Punishing to the Child **[q0]**
The adult demonstrates a question/ prompt with the following issues 1. Disrupts the child's interest/ engagement in a manner that it disrupts the book sharing activity 2. Keeps asking the question after the child has given a correct response 3. Follows child's correct or incorrect response with another question
Child is Not Interested **[qli]**
The child is not engaged in the book and the parent correctly abandons the question sequence. To correctly abandon the sequence, the adult must not repeat the prompted target and instead follow the child's lead or go back to reading the book.

Correct Sequences



Prompting Strategies (Coding Milieu Episodes)

Milieu episodes (prompting episodes) are a sequence of prompts often in response to the child's request, sometimes elicited by a Time Delay. Milieu episodes BEGIN when the adult does one of the following milieu teaching procedures and INCLUDES at least one of the following: open question, choice question or model prompt:

Open question: Question or statement that requires a verbal or nonverbal communicative response from the child that provides information that the adult does not already have (i.e., there is not a prescribed or "correct" answer). Not all real questions start a milieu episode. To start a milieu episode the real question must:

- Imply that the child made a request
  Example: "Which one should we use?" → open question that triggers a milieu episode
  Example: "What is your favorite color?" → open question that does not trigger a milieu episode
- Contain the words "we", "should", OR "want".
- "What do you say" will be considered an Open Prompt ONLY when it is used in response to a child request.

Open questions provide the least amount of support for the child.

Holding up a truck and an airplane and asking "¿Que quieres?" does not give the child any clue as to the name of the objects you are holding. They must understand that they have to say something in exchange for the object they desire. Then they must find the word "carro" or "avión" in their brains and bring it out as language. So even though holding up a truck and an airplane is functioning as a choice, it is the language of "¿Que quieres?" that makes that question an open question.

Choice Prompt: A choice question is an either/or question that requires a verbal or nonverbal communicative response from the child that provides information that the adult does not already have (i.e., there is not a prescribed or "correct" answer).

Choice questions provide a higher level of support for the child. Holding up a truck and an airplane and asking "Quieres el carro o el avión?" gives the child the words for the objects you are holding. This offers more support than an open question in which the language is not directly modeled for the child. It also makes it a bit clearer that the child needs to make a verbal attempt to say the name of the object they want in exchange for that object.

Model Prompt: A model prompt is a word, phrase, or sentence that the adult states with the intention that the child will imitate. The adult may say, "Di . . ." or emphatically state the word(s) to be imitated so it is clear to the child that the adult is prompting the child to imitate the words/actions. “Puedes decir…” counts as a model prompt.

Model prompts offer the most support for the child. Holding up the truck and saying “Di ‘carro’” lets the child know exactly what the word is for the object you are holding and it lets them know the expectation that you want them to say that exact word in exchange for the truck.

***Note: Model prompts (i.e., ‘say ball’/ ‘di la pelota’) are considered at target level if the adult is prompting the child’s target.**

Each milieu episode may have one or several of these techniques. If the adult is trying to get the child to produce the same or a very similar utterance it is considered to be part of the same episode. Prompts that require the same kind of information from the child are grouped into the same episode:

Same Episode
a ¿Que quieres?
c la pelota
a di “quiero tirar la pelota”
c queiro la pelota.

Different Episodes
A di vaca.
c (no response for 2 seconds)
a di helado
c NO!
a ¿que quieres?

Each Milieu episode is scored depending on how the episode is carried out by the adult. This score represents the quality and correctness of the episode. There are 9 quality indicators of the milieu episode (described more fully below), with each indicator receiving 0 to 2 points (for a maximum score of 10).

There are 3 types of episodes:

1. Milieu episodes that require a child verbal response and is in response to a request [me]

2. Milieu episodes in which the child loses interest [mli]. To be coded as [mli], the child must have requested the object or action at some point during the episode. To be coded as [mli] the adult must also not give the object that was being prompted (since the child lost interest). These episodes do not receive a score.

3. Milieu episodes in which the child never had interest and then the adult intentionally abandons the episode ***after only one prompt*** because they have realized that the child isn't interested [mac]. To be scored as [mac – milieu abandoned correctly], there must be a secondary adult behavior (e.g., shakes head, says "you don't want …", the trainer interrupts the episode and the parent stops prompting). To be coded as [mac] the adult must also not give the object that was being prompted (since the child never had interest). If the child does not request and the adult abandons after giving more than one prompt, score the episode as normal – it cannot be a [mac]. If the child does request and the adult starts prompting about an object in which the child is not interested, the adult can prompt ***only once*** before realizing the child is uninterested and abandoning the episode [mac]. These episodes do not receive a score.

Milieu Episode Scoring

Milieu Episode scores go on a separate line in the transcript. When scoring a milieu episode, insert a line on the transcript after the last adult utterance involved in the episode (e.g. labeling the object/action).

Example:

a di|decir carro.

c {grabs}.

a di|decir carro.

c carro.

a carro {gives}.

+[me3]

Milieu Episode Scoring Guidelines

Outstanding Performance
+[me3]

The adult demonstrates a high-quality Milieu Episode. The adult must:

1. Begin the Milieu Episode naturally and in response to a non-target child request.
2. Prompt a language target at the child's target level.
3. Prompt the same words throughout the episode.
4. Use the correct prompting sequence.
5. Give the child adequate time to respond.
6. Stop prompting when the child loses interest, says the prompted words, or responds to an open question with a target request.
7. Give the child the prompted and requested object/action at the end of the Milieu Episode.
8. Label the object/action with the prompted language target.

Not Great Teaching
+[me2]

The adult demonstrates a Milieu Episode with one of the following issues:

1. Begins the Milieu Episode at a time when the child is NOT requesting.
2. Prompts below the child's target level or using a non-target word.
3. Does not model target language when ending the episode (giving the object/action).
4. The adult does a model prompt but only models the target using AAC.

The adult ends at the Time Delay with one of the following issues:

1. Does not wait for a clear request.
2. Gives the requested object/action before using a language target.

Confusing to the Child
+[me1]

The adult demonstrates a Milieu Episode with one of the following issues:

1. Changes the prompted words during the Milieu Episode.
2. Uses the incorrect prompting sequence
3. Gives the object inappropriately or loses control of the object.
4. Continues prompting after the child has the desired object/action.
5. Continues prompting after the child loses interest.
6. The adult has to recruit the child's attention (e.g., calling their name) before delivering the TD.
7. CHOICE – the adult holds the objects within the child's reach so they can grab them rather than requiring the child to communicate by reaching or pointing.
8.

The adult ends at the Time Delay with one of the following issues:

1. The adult does not label the requested object/action with a language target OR does not repeat/expand when the child requests using a language target.
2. CHOICE ONLY – does not present two objects that have distinctly different language targets at the child's target level.

Punishing to the Child
+[me0]

The adult demonstrates a Milieu Episode with one of the following issues:

1. Prompts above the proximal target level.
2. Continues prompting after the child responds with the prompted words.
3. Begins the Milieu Episode in response to a child target request.
4. Does not give the object at the end of the episode.
5. Does not give the child adequate time to respond.
6. The Milieu Episode begins in a way that is NOT natural and disrupts play.

The adult ends at the Time Delay and has one of the following issues:

1. The ME is NOT natural and interrupts play.
2. The adult does not give the requested object/action to the child at the end of the Time Delay.

Child Loses Interest
+[mli]

The child loses interest in the object/action and the adult abandons the Milieu Episode appropriately by not giving the child the prompted object/action.

The adult has to have started the ME appropriately (i.e., at a natural time, without recruiting the child's attention) to get this code. If it violates any of those criteria, code with a score, regardless of the child's interest.

Milieu Abandoned Correctly
+[mac]

The child was NEVER interested in the Milieu Episode, and the adult realizes it after ONE PROMPT and abandons the episode appropriately by not giving the prompted object/action.

Outstanding Performance [me3]

1. **Begins the Milieu Episode naturally and in response to a non-target child request.** The episode must begin naturally, in such a way that it does not disrupt play. The adult should not do anything to demand the child's attention, such as taking away toys, clearing play space, etc.
   The episode should also begin in response to a non-target child request. If the child is requesting using a target, there is no reason to prompt them. If the child does not want whatever you are prompting, there is also no reason to prompt them.

2. **Prompts a language target at the child's target level.** The adult should prompt a language target at the child's target level to teach the child the language target. Targets are chosen by the therapist for the child and vary between children (see **Adult Target**).

3. **Prompts the same words throughout the episode.** The adult should not change the words they are prompting within an episode because this is confusing to the child. This includes adding or taking away words between prompts. This only applies to Choice Prompts and Model Prompts. The wording of the choices should match the wording of the Model prompt.
   Examples:

   (1-word targets)
   a pelota o carro?
   c {grabs car}.

   a di|decir carro.

   (2-word targets)
   a ¿quieres|querer la casa o quieres el carro?
   c carro.
   a di, quiero|querer el carro.

4. **Uses the correct prompting sequence.** The prompting sequence is as follows: Open Question→Choice Prompt → Model Prompt (Say prompt).
   The adult is not required to use all of these options, but they cannot be used out of this order (e.g. model prompt → open question). The adult also may not use more than 2 prompts in each category.
   If the child does not respond to an Open Question and/or Choice Prompt with the prompted target, then the adult **must** give at least one Model Prompt.
   If the child does not respond to the first Model Prompt with the prompted target, the adult **must** give the Model Prompt a second time.
   If the child does not say all of the correct speech sounds (e.g., "ca" for cat), the adult has the option of giving the model procedure again, or phonologically recasting/expanding.

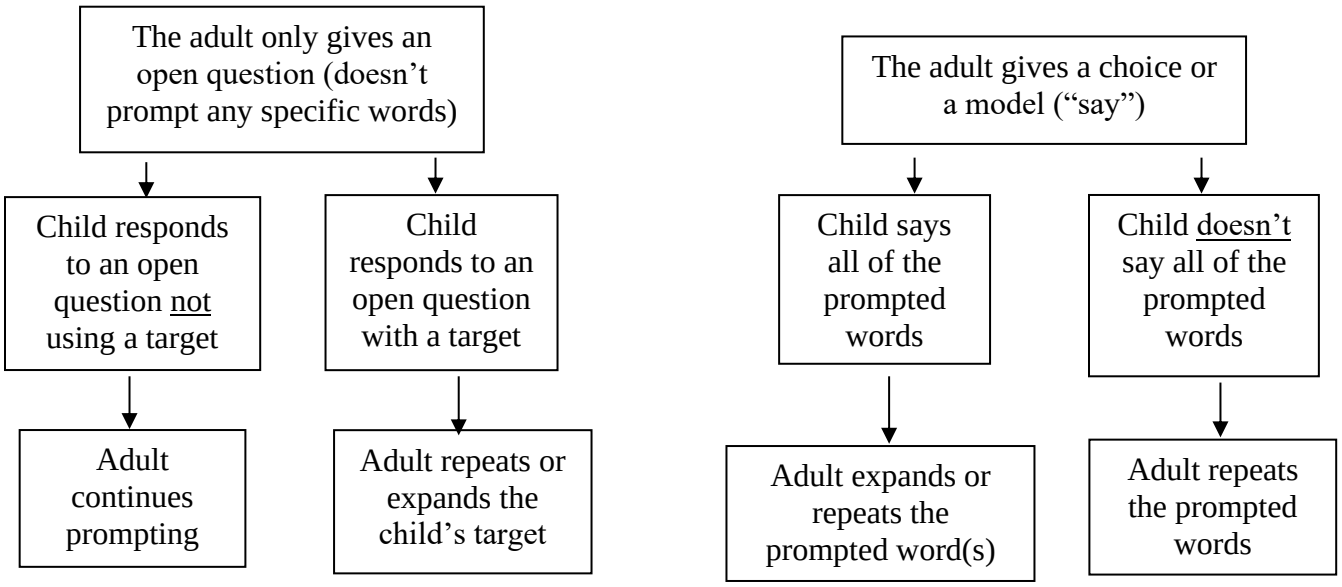
5. **Gives the child adequate time to respond.** The adult must give the child at least **3 seconds** to respond after <u>all prompts</u>. This applies only to prompts – non-prompt questions such as "what color is this" do not count as prompts and it does not matter if the adult waits 3 seconds after these utterances.

6. **Stops prompting when the child loses interest, says the prompted words, or responds to an open question with a target request.** This is a measure of "over-prompting." The child needs to learn to respond to prompts in order to receive a desired object – if the adult continues to prompt beyond the expected number of prompts, this will frustrate the child. The same is true if the child says the words the adult prompts and the adult continues to prompt.
   It is also counterproductive to continue to prompt an object/action that the child no longer desires – the child will have no motivation to respond to the prompts. This is where control of the item is important – if the child is able to take the desired object before the end of the episode, he will have no motivation to respond to the prompts since he already has his reward.

7. **Gives the child the prompted and requested object/action at the end of the Milieu Episode.** The adult must give the child the prompted and requested action or object regardless of whether they completed the prompting sequence correctly.
   They should only give the object if the child shows interest in the object or action.
   If the episode does not begin in response to a request for an object/action, and the adult prompts an object/action, the child must show overt interest in the prompted object/action (reach, point, give) or respond with the prompted word(s) for the adult to correctly give the prompted object/action at the end.
   If the adult goes through the entire prompting sequence they should give the prompted object/action unless the child is blatantly uninterested.
   The adult should give the prompted & requested object/action within **2 seconds** of ending the episode unless the adult is physically having trouble doing so (ex: the child wants the jar open and it takes the adult more than 2 seconds to open it).

8. **Labels the object/action with the prompted language target**. The adult must end the episode by labeling the prompted and requested object/action with the prompted language target within one second of intentionally giving it.

The language used by the adult to end the episode should be based on how the child responds to the episode. Follow the flowchart below to determine how the adult should end the episode. If the adult does something not listed, the episode should not be scored [me3].



Not Great Teaching [me2]

1. **Begins the Milieu Episode at a time when the child is NOT requesting.** If the child is not requesting, and the adult begins a Milieu Episode, it is considered not great teaching [me2]. This is because the point of Milieu Episodes is to use opportunities when the child is requesting with below-target-level language to teach them targets. The child's desire for an object/action motivates them to respond and receiving the object/action at the end of the episode reinforces them for responding or at least acquiescing to prompting.

2. **Prompts below the child's target level or using a non-target word.** If the adult prompts a below target or non-target word (such as a linguistic other) it is considered not great teaching [me2] because it is not helpful to teach the child non-target words. This is different from prompting above-target level words because below and non-target words are not necessarily more difficult for the child to say, they are just not as useful as targets are for the child to learn.

3. **Does not model target language when ending the episode.** If the adult does not model target language at the end of the Milieu Episode it is considered not great teaching [me2] because they are not teaching the child a language target.

Confusing to the Child [me1]

1. **Changes the prompted words during the Milieu Episode.** This only applies to Choice Prompts and Model Prompts. If the adult only asks an open question, this is not applicable. If the adult adds or takes away any words between prompts, score **[me1]**.
   Example:
   a say doll/s.
   c x.
   a say want the doll/s.

2. **Uses the incorrect prompting sequence.** The prompting sequence is as follows: Open Question→Choice Prompt → Model Prompt (Say prompt).
   The adult is not required to use all of these options, but they cannot be used out of this order (e.g. model prompt → open question). The adult also may not use more than 2 prompts in each category.

   If the child does not respond to an Open Question and/or Choice Prompt with the prompted target, then the adult must give at least one Model Prompt.

   If the child does not respond to the first Model Prompt with the prompted target, the adult must give the Model Prompt a second time.

   If the child does not say all of the correct speech sounds (e.g., "ca" for cat), the adult has the option of giving the model procedure again, or phonologically recasting/expanding.

   If the adult goes out of the above order, score **[me1].**
   If the adult uses more than 2 prompts in a category, score **[me1].**
   If the adult fails to give 2 Model Prompts when required, score **[me1].**
   If the adult starts the episode with a yes/no question, score **[me1].**
   If the adult uses a yes/no or test prompt, score **[me1].**

   If the adult starts an episode with a yes/no or a test question they do not get credit for following the correct prompting sequence. The same is true if they insert a faux *prompt* yes/no question into the milieu episode; however, do not penalize the adult if they are merely responding to the child within the episode.
   Example:
   a what is this?
   a say elephant. –
   +**[me1]**

   a do you want the puzzle?
   c {nods}.

a say puzzle. –**[me1]**

3. **Gives the object inappropriately or loses control of the object. .** The adult must give the child the prompted and requested action or object regardless of whether they completed the prompting sequence correctly. They should only give the object if the child shows interest in the object or action. If the episode does not begin in response to a request for an object/action, and the adult prompts an object/action, the child must show overt interest in the prompted object/action (reach, point, give) or respond with the prompted word(s) for the adult to correctly give the prompted object/action at the end. The adult should give the prompted & requested object/action within **2 seconds** of ending the episode unless the adult is physically having trouble doing so (ex: the child wants the jar open and it takes the adult more than 2 seconds to open it). If the adult goes through the entire prompting sequence they should give the prompted object/action unless the child is blatantly uninterested.

   If the adult gives or loses control of the prompted and requested action or object before the episode has ended, score **[me1].**
   If the child lost interest in the action or object and the adult continues to prompt and gives it anyway, score **[me1].**
   If the episode does not begin in response to a request and the adult does not give the child time to respond between the adult prompting and ending the episode, score **[me1].**

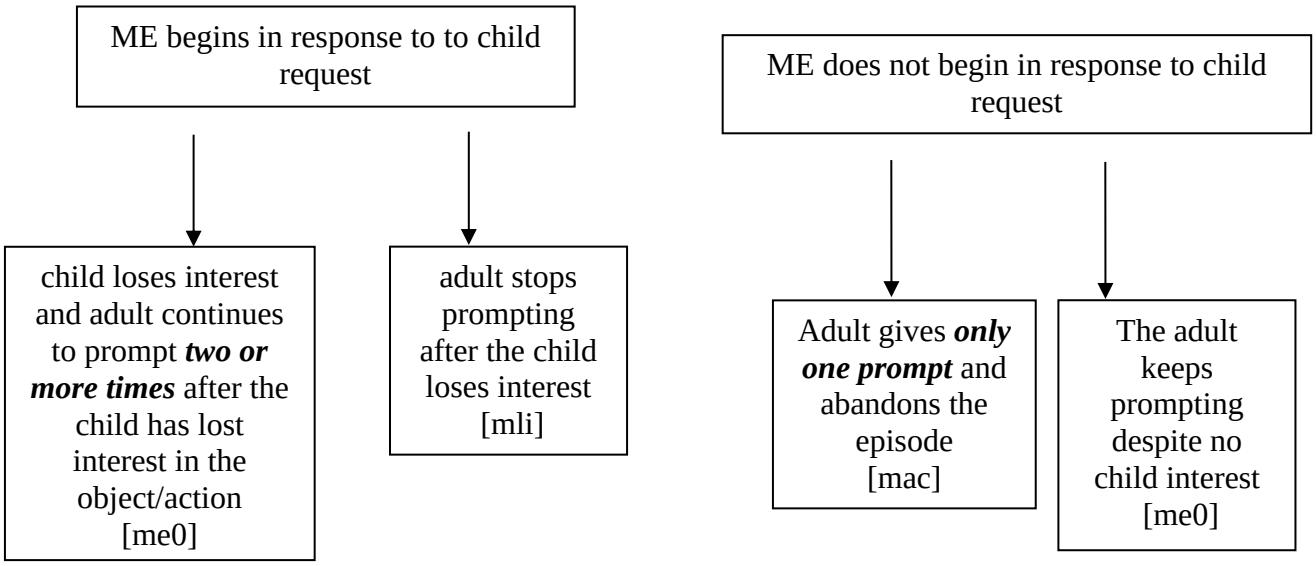
Punishing to the Child [me0]

1. **Prompts above the proximal target level.** If the prompted words are more than 2 words above the child's target level, score **[me0].** The word "say" does not count.
   Example:
   (1-word)
   a say give me the red cup. – **[me0]**

2. **Continues prompting after the child responds with the prompted words. Continues prompting after the child has lost interest in the prompted object/action.** This is a measure of "over-prompting." The child needs to learn to respond to prompts in order to receive a desired object – if the adult continues to prompt beyond the expected number of prompts, this will frustrate the child. The same is true if the child says the words the adult prompts and the adult continues to prompt.
   If the adult continues to prompt after the child says the prompted target, score **[me0].**

3. **Continues prompting after the child has lost interest in the prompted object/action.** It is also counterproductive to continue to prompt an object/action that the child no longer desires – the child will have no motivation to respond to the prompts. This is where control of the item is important – if the child is able to take the desired object before the end of the episode, he will have no motivation to respond to the prompts since he already has his reward.
   If the adult continues to prompt after the child does not remain interested in the object or action being prompted, score **[me0].**
   If the child gains control of the object/action and the adult continues to prompt, score **[me0].**

Use the following flowchart to decide if it should be scored [me0], [mli], or [mac].



4. **Begins the Milieu Episode in response to a child <u>target</u> request.** If the child is requesting using a target, there is no reason to prompt them. This only applies to language targets at the child's current target level. Language targets are child-specific and each child may have words that do not count as targets at his/her level, as specified by the therapist.
   If the child uses a language target to request and the adult begins a Milieu Episode, score **[me0]**.

5. **Does not give the object at the end of the episode.** If the child requests the object/action at the beginning of the ME or becomes interested in the prompted object/action during the episode, and the adult does not give the object/action, score **[me0]**.

6. **Does not give the child adequate time to respond.** The adult must give the child 3 seconds to respond between prompts. This only applies to ME prompts, not to yes/no questions or any other turns the adult may take during the ME. If the adult does not give the child 3 seconds to respond after a ME prompt, score **[me0]**.

7. **The Milieu Episode begins in a way that is NOT natural and disrupts play.** The initiation of episodes that *overtly* disrupt the interaction or involve hoarding of toys or taking toys away from the child should be scored [me0]. This is a measure of the initiation of the episode; some children do not respond well to prompting and the episode itself will be disruptive because the child does not like being prompted. This is not a measure of the child's response – it is a measure of if the episode flows naturally with the play.
   Examples:
   The adult takes the Mr. Potatohead hat out of the child's hand and holds it up to Mr. Potatohead and waits – disruptive **[me0].**
   While the child is playing, the adult clears the table of all toys and holds up two choices – hoarding **[me0].**

Additional Resources

Video Walk-Through of Coding in SALT

Video Walk-Through of Tier Level Determination

Table of Tier Levels and Definitions

Notes:

- These are general guidelines. Linguistic targets stay consistent until formally changed based on assessment data, but other strategies can change even within sessions based on child engagement.
- Children's tier levels can be different for English and Spanish and are based on the child's language abilities in that language at that point in time. Linguistic targets are determined at every time point. It is possible for children to move backwards in Tiers (e.g. start at Tier 2 Spanish at t00 and be classified as Tier 1 in Spanish at t01)

	Child Characteristics	**Adult Use of Linguistic Targets** **At target = 35% of utterances** **Proximal target = 35% of utterances**	**Adult use of Strategies**

Tier 1a—building engagement to get ready to learn	**Behavior characteristics**
	• Not able to attend to attend to an activity (toys or books for at least 5 minutes) without heavy support.
	• Negative behaviors (escaping, swiping, saying "no", etc).
	Language characteristics
	• Child uses less than 50 different words in the language (English or Spanish) across the 2 20-minute language samples
	• Child's MLU is less than 1.5 in that language/ those languages across the 2 20-minute language samples
		Spanish at Target
		• Article + singular noun (common nouns)
		• Inflected (common) verbs in the present and present progressive forms
		• Modifiers – can also be at target if they are specific, related to the play action and include "que"
		Spanish Proximal Targets
		• Article + noun + present or present progressive verb
		• Reflexive verb
		• Preterit or other verb tense
		• Verb + direct or indirect object clitic (attached or unattached)
		• Article + noun + modifier
		• Article + noun + common verb
		English at Target (if applicable)
			• Keep activities short to end with child successfully engaging
			• Behavior strategies to build interest/ engagement
			  ○ First/then
			  ○ Timer
			  ○ Child specific reinforcers
			• Focus on environmental arrangement to promote engagement (e.g. removing distractions, choosing a location to limit escaping behaviors, sitting at the table)
			• Manipulatives to add interest in books
			  ○ Puppets
			  ○ Toys related to book
			• Maintain a quick pace, modeling play, etc.
			• Drop play level to make it cognitively easy and focus on length of time of engagement (e.g. add in tickles and kisses from agents when playing with agents, go under and over a blanket, play peek-a-boo, blow bubbles)
			• Respond to all child gestures, vocalizations, and words
			• Use Tier 1 targets (see linguistic targets)
			• Limit questions in books and limit time delays (no prompts)
			• Flip through pages in the book, naming and pointing to pictures (wait for better engagement before reading text)

Tier 1b—ready for vocabulary	**Behavior Characteristics**
	
	• Can attend to book sharing and a play routine for at least 5 minutes without needing behavioral supports. *BUT Note kids can fluctuate between Tier 1b and Tier 1a even within a session (not necessarily a linear progression). Move to Tier 1a strategies as needed when interest and engagement are fragile.*
	Linguistic Characteristics
	
	• Child uses less than 50 different words in the language (English or Spanish) across the 2 20-minute language samples
	• Child's MLU is less than 1.5
		• Nouns (singular and plural)
		English Proximal Targets (if applicable)
		
		• Noun + modifier (with or without article)
		• Simple sentences, including:
		  • Pronoun + verb (in grammatically correct tense)
		  • Article + Noun + verb (in grammatically correct tense)
		  • Article + Noun + verb + object or state or location
		  • Article + Noun + state or location
			• Environmental arrangement
			• Respond to all child vocalizations and words
			• Model and expand play (horizontally and vertically)
			• Mirror and map
			• Use Tier 1 Targets (at Target and Proximal Targets)
			• Expand child's utterances
			• Read/ simplify text in books
			• Ask simple questions in books (answers should be targets)
			  ○ What is it? ¿Qué es esto? ¿Qué son?
			  ○ What are they doing? Qué hacen los _____? ¿Qué están haciendo?
			• Use time delay and prompting strategies in play when engagement and interest are high

Tier 2—building phrases	**Behavior Characteristics** • Can attend to book sharing and a play routine for at least 5 minutes without needing behavioral supports. *BUT Note kids can fluctuate engagement even within a session (not necessarily a linear progression). Move to Tier 1a strategies as needed when interest and engagement are fragile. Maintain Tier 2 linguistic targets* **Language Characteristics** • Child uses 50 or more different words (with diversity) in the language (English or Spanish) across the 2 20-minute language samples. • Child's MLU is 1.5 or greater in that language/ those languages in the language samples • Child has at least 4 different word combinations in that language (from language sample and/ or CCX) • For Spanish, at least one example of article use and present progressive verb use from language samples and CCX	**Spanish at Target** • Article + noun + present or present progressive verb • Reflexive verb • Preterit or other verb tense • Verb + direct or indirect object clitic (attached or unattached) • Article + noun + modifier • Article + Obscure/elaborated Noun • Article + Plural Noun • Negation + Inflected Verb **Spanish Proximal Targets** • Correctly inflected verbs (in any tense besides present,present progressive and preterit) • Obscure verbs correctly inflected (low frequency, very specific) • Article + noun + modifier + inflected verb (word order flexible) • (Article + Noun +) Verb + Prepositional Phrase **English at Target (if applicable)** • Noun + modifier (with ot without article) • Simple Active Declarative sentences, including: • Pronoun + verb (in grammatically correct tense) • Pronoun + verb + object • Pronoun + state or location • Article + Noun + verb (in grammatically correct tense) • Article + Noun + copula +state or location **English proximal targets** • Article + Noun + verb + direct object • Article + Modifier + Noun + Verb • Complex Active Declarative Sentences	• Environmental arrangement • Respond to all child vocalizations and words • Model and expand play (horizontally and vertically) • Mirror and map • Use Tier 2 Targets (at Target and Proximal Targets) • Expand child's utterances • Read text in books • Ask questions in books (answers are targets) o What is it? ¿Qué es esto? ¿Qué son? o What are they doing? Qué hacen los _____? ¿Qué están haciendo? • Use time delay and prompting strategies in play when engagement and interest are high

		with less than 5 content words including: • Compound nouns + verb • Noun + Compound verbs • Two verb phrases / embedded infintive clause / catenative preceding a verb	