E-QUAL III
Children's Engagement Codes

Persistent (P)

MUST involve some PROBLEM SOLVING and some CHALLENGE, often indicated by failed first attempt. Involves either changing strategies or using the same strategy again to solve the problem or reach a goal.

Example with grown-ups (T) or peers (K)
- Tries another way to get the adult to do or understand something (e.g. having failed to be understood, the child uses different words to get the messages across; the child tries to get the teacher to give him of her a toy).
- Tries to get the attention of another child or teacher by repeatedly calling their name: "Jason, look what I have. Jason, look! Jason, Jason!
- Tries to get adults or another child to repeat things (e.g., when the adult has done something the child likes, the child begs for more).
- Includes resistance to giving up a toy to a peer when the accompanying behavior is <u>age appropriate</u> (e.g., the toddler who persists in holding on to a toy when another child attempts to take it).

Examples with Objects (O):
- Solves problems (e.g., when a toy falls behind the furniture, the child rapidly finds a way to retrieve it).
- Tries to complete tasks or solve problems, even if it takes a long time to finish (e.g., the child who sticks with a tasks until it is completed, and the baby who perseveres at trying to fit stacking items together).
- Finger feeds with difficulty.
- Child tries to get blocks out of the shape sorter by sticking her hand in on of the holes. She can't get it out, then turns the sorter upside down and the block falls out.

Does NOT include:
- Putting puzzles together. Although this is a persistent activity, we will not be able to code the fact that the child is sticking with the puzzle for a long time- this is a different level of observation. For practical reasons, completing puzzles will be coded as constructive (C), unless the child clearly has trouble putting in the pieces, and is trying out different ways to make the puzzle piece fit.
- Does not include just asking for continuation of a game: there must be a challenge involved. The child who says "Mommy bounce" to request continuation of a game involving the mother's bouncing the child up and down on the bed should be coded as encoded (E) behavior. If the child continues the request because the mother is not listening, or finds other ways to get the mother's attention the code should be persistence (P).
- Hammering a nail into a piece of wood, or rolling out play dough with a rolling pin unless there is a challenge involved.

Symbolic Behavior (S)

The use of conventional forms of behavior such language, pretend play, sign language, drawings, etc., that allow the child to reflect on the past, talk about the future, and construct new forms of expression though combinations of different symbols and signs. *The major characteristic is DECONTEXTUALIZATION* or the capability to communicate about something or someone not physically there including abstractions (e.g., "when is my birthday?"). In the case of *pretend* play, the child's behavior must involve (a) talking in character, (b) substituting objects for other objects in pretend play, or (c) acting out a scenario.

Examples with grown ups (T) and peers (K)
- Child says "member doggie" to communicate on an encounter that happened several days ago.
- Child says, "go play?" to request an adult to go to the park.
- Communication "want drink" in the absence of reference-giving cues.
- Action out part of a previously heard story or scenario. For example, "You're the mommy. You have to get in the car now."

Examples with objects (O):
- Child remembers the place of an object after several hours.
- Puts a peg to doll's mouth as thought feeding the baby (object substitution).
- Treating a doll as active. For example the child moves the dolls arm so the doll drinks, rather than holding the cup to the doll's lips or moving the arm to say "bye-bye".
- The child feeds a doll with a toy bottle.

Does NOT include:
- Brushing a doll's hair with a brush. This would be coded as differentiated (D) since the brush is used as it is intended to. The child is actually brushing.
- Drawing. Although drawing an animal the child saw on a fieldtrip could be coded as symbolic, the children we are coding in this study are at an age (12-36 months) at which they mostly draw from conventionalized rules, rather than from a symbolic representation. Drawing will therefore be coded as constructive (C).

Encoded Behavior (E)

Encoded Behavior is only used for social behaviors. The use of ***conventional*** forms of behavior that are ***context bound*** and that depend on referents or perceptually present stimuli as a basis for evoking the behaviors. While encoded behavior can be used to code both social engagement and engagement with materials, in this study we will only use it for social behaviors. Thus, encoded behavior in this case includes the use of ***understandable language***- but not repetitive (U) or decontextualized (S), to communicate about objects or events that are within the immediate context.

Examples with grown ups (T) and peers (K)
- Use of sign language or a foreign language to ask for help.
- Continuing a conversation about something that is physically there. For example about the artwork on the table, a picture un a storybook, etc.
- Child says "mommy bounce" to request continuation of a game involving the mother's bouncing the child up and down the bed.
- Imitation of new words (only when understandable).
- The child answers "green" to the teacher's question "What color is that?" or "Moo" to the teacher's question "what sound does the cow make?" Although the cow is a symbolic representation of a real cow, the skill is still low enough to call it encoded (E)

Examples with Self (L):
- Singing a recognizable song while alone.
- Talking to oneself while playing.

Does NOT include:
- The child saying "mommy bounce" when she refers to a game played yesterday would be coded as symbolic (S).
- The child talking in character would be coded symbolic (S).

Constructive Play (Co)

ONLY USED WITH MATERIALS

Manipulation objects to *create*, *make* or *build* something. Putting objects together in some type of spatial form, but not just handling an object (Differentiated (D)) or banging blocks together (undifferentiated (U)). Must include some indication of *intentionality*.

Examples with Objects (O):
- Building a construction with Lego's.
- Putting puzzle pieces together.
- Putting rings on rods, pegs in peg boards, play with "buzzy" beads etc.
- Using clay or play dough to make cookies, hammering a nail into a piece of wood.
- Drawing, painting definitive objects.
- Copying letters.
- Tying or taping pieces of Styrofoam together to build a house.

Does NOT include:
- Manipulating a Lego piece (holding, turning it around). This would be coded as differentiated (D).
- Trying to fit a puzzle piece over and over again would be coded as persistence (P).
- Just painting along would be coded as differentiated (D).
- Hammering a nail in a piece of wood when the child has difficulty doing so would be coded as persistence.

Differentiated Behavior (D)

The coordination and regulation of behavior that reflects *elaboration* and progress toward conventionalization. Provides the child with a set of behaviors that permits adaptation to environmental demands and expectations, especially social standards. Includes *active interaction* with the environment but not persistent (P), not in pretend play (S), no repetitive behavior (U), not using conventional language (E), and not putting objects together (C).

Examples with grown ups (T) and peers (K):
- Using nonverbal gestures (point, give, shake head.
- Using objects to initiate play with a caregiver.
- Choosing favorite activity among a number of options.
- Imitating motor actions made by other children.
- Extending arms to be picked up.
- Vocalize to indicated dissatisfaction with another child touching his toys, but not in understandable language (E), and whining or crying about it (N).

Examples with Objects (O):
- Independent cup drinking.
- Using a utensil to eat.
- Moving a car on the floor, but not in a repetitive fashion (U) and without playing out scenario (S).
- Licking cool whip from one's fingers (code object before coding self).

Examples with Self (L):
- Hopping, skipping, or getting up when the child is focused on that activity.
- Infant crawling for the sake of crawling.

Does NOT include:
- Singing a song (E).
- Vague humming or repetition of a few words (U).
- If the child is being moved around by the teacher the code should be (N), unless the child actively interacts with the teacher or continues to play with a toy she is holding.

Focused Attention (F)

Includes watching or listening to feature in the environment, and must involve ***direct look at*** a feature. Looking must be sustained for at least 3 seconds; any shorter, and a previous behavior is coded. Focused attention is characterized by ***serious facial expression***, and a ***quieting of motor actively*** extraneous to the task at hand. The child is responsive to a narrower range of input. Implies greater ***selectivity*** and greater ***intensity*** than more casual attention (description of this code follows).

Examples with Grown-Ups (T) and peers (K):
- Attending to the teacher who is reading a book.
- Laughing in response to an interesting event.
- Watching another child build something.
- Watching the teacher who is demonstration how to do something.
- Watching an adult walk into the room.

NOTE: DOES include following a conversation between two people, even tough the child is switching attentions between the two.

Examples with Objects (O):
- Looking at the tape player when music is playing.
- Tracking an object moving across the child's visual field.
- Orienting towards sound.
- Looking at a new toy placed on the table.

Does NOT include:
- Staring blankly (N).
- Moving towards an object (D).

Undifferentiated Behavior (U)

The child interacts with the environment without differentiating his or her behavior (i.e., in a *repetitive* manner), using *simple low-level behaviors*. Must not involve repetition for the purpose of solving a problem (See P earlier). A repetitive behavior down for the purpose of eliciting a change in the environment or to maintain feedback produced by the child's own actions. This coded is rarely used with peers. Remember that undifferentiated behavior is not bad. It is developmentally appropriated for young children.

Examples with grown-ups (T) and peers (K):
- Using repetitive vocalizations (e.g., the child says, "Ba-ba-ba-ba-ba").
- Patting a cake, over and over (with intention of actually flattening the play dough).
- Touching the adults mouth repetitive to get her to day more, but if not persisting (P).
- Holding another child and rocking him or her back and forth.

Examples with Self (L):
- Waves hands, shakes head, or flaps arms in a repetitive manner. If this happens reflexively it is coded as undifferentiated (U), but if the behavior continues it should be coded as nonengaged (N).
- Hums a repetitive sound.

Example with objects (O):
- Bangs a block on the table over and over. This code is most often used with objects and is more likely to be used with infants. And infant mouthing or chewing a toy in a focused, determined,. Exploratory manner is undifferentiated behavior. If the child is absentmindedly mouthing a toy while looking at something it would be coded as attention.
- Shaking and banging a rattle to produce a sound.
- Making a mobile move.

Does NOT include:
- Rocking oneself (N).
- Clapping hands when the teacher asks who can clap their hands.

Casual Attention (Ca)

Casual attention, can be described as more relaxed and more wide-ranging than focused attention. Again, the child has to be *looking at something* for a total of at least 3 seconds (otherwise code the previous behavior). However, the child is attending to a *sequence* of a *range of things in a sequence* within the three seconds as opposed to being attentional to one object or person.

Example with Grown-Up (T) and Peers (K):
- Eating and looking around the table.
- Looking around the room to see where to go next.
- Looking for another child or the teacher in the room.

Examples with Objects (O):
- Child looks at different objects in a sequence.

Does NOT include:
- Staring blankly (N).
- Moving towards an object (D).
- The child looking up while eating, but clearly engaged in consuming food (D).
- When infants are waiting to be fed and their eye gaze moves around. If the child fails to focus on a specific object for at least 3 seconds it is coded as nonengaged (N) instead of continuing the previous code.

TRICKY:
If a child is chewing on food or on a toy and becomes attentional to a teacher or other child, the code is based on the focus of the child's eye gaze. The same would be true in a situation where a child is engaged with a toy , but begins watching another child while one hand remains holding or manipulating the toy. In theses cases the changing of the child's eye gaze would indicate a transition to the attentional state.

Nonengaged Behavior (N)

Unoccupied. ***None of the other behaviors are occurring***; (A) needlessly waiting (i.e., not in turn taking situation), (B) waiting even though the child knows what is coming next and is anticipating the activity (i.e., sitting at the table waiting for food), (C) staring blankly, (D) wandering aimlessly, (E) crying, whining, etc., (F) aggressive or destructive acts, (G) rule breaking behavior (i.e., throwing or kicking toys).

Examples with Grown-Ups (T) or Peers (K):
- Waiting for teacher to begin activity.
- Crying after adult stimulus (i.e., adult has said something or moved a toy away).
- Crying with no antecedent.
- Failing to respond when a response should be expected
- Staring blankly during activity with adult.
- Evading a teacher's request by whining and protesting.
- When a teacher is carrying an infant code infant behavior as attentional when the child is visually focused, but if the infant has a blank expression, code (N).
- Crying after a peer stimulus (i.e., another child has hit the child).

Example with Object (O):
- Repeatedly bangs and object without any awareness of the action (i.e., a 4 year old idly taping a pencil).
- Breaking a toy in anger.
- Tearing paper unnecessarily.
- Wandering aimlessly.
- Sitting alone doing nothing.

Examples with Self (L):
- Falling, stumbling.
- Yawning, child who sucks his thumb.
- Nose picking.

Uncodeable Behavior (X)

To be used when a child is ***no longer visible***. This code is used when you cannot see a child sufficiently to eliminate all behavior codes but one. The only exception to this is coding participation when the view does not clearly eliminate the possibility of persistence. When only part of the child is visible, but it is clearly apparent that the child is doing the proper engagement code is to be used. Coded when the child leaves the room to, for example, go to the bathroom. Or if the child crawls in a structure which would make him or her invisible to the observer.

Type of Engagement

Each level of engagement is accompanied with a type of engagement. There are four possible types of engagement:

K   Kid
T   Grown-Up (any adult in the room)
O   Object
L   Self, body parts

There is only one type of engagement possible per level of engagement. However, the type of engagement changes when the child is casually attending. Always doe the type in which the child is engaged at the prompt.   For example, when the child started looking at an object and then switched to the teacher, code teacher (T).

Decision Rules

When two or more <u>levels</u> of engagement are possible

The levels of engagement previously listed are in hierarchal order. Code the higher ordinal of two possible codes. An exception should be made for nonengaged. When in doubt between a particular code and nonengaged, code nonengaged. However when two codes are going on at the same time (i.e., the child is eating (D) and attentional to the teacher (F) code the higher of the two which is (D).

Examples
- If a child is playing with another child (D/K), and they are both working hard to complete a puzzle (Co/O) together, code Co/K (Co is higher on the list than D).
- When a child is building with blocks with another child (C/K), and at the same time talks about the animals in the zoo she saw yesterday code S/K. Symbolic is higher on the hierarchy than constructive behavior.

When two or more types of engagement are possible

If the two levels of engagement are the same, but types of engagement are different, code according to the following hierarchy:

K
T
O
L

Examples
- If a child is using materials to represent other objects (S/O) while talking in character during pretend play with peers, code S/K. Engagement with peers (K) is higher on the hierarchy than engagement with objects/materials (O).
- If a child is repeatedly trying to get an adults (P/T) and a child (P/K) to play with him or her code (P/K).
- If a child is talking to a peer (E/K) while putting a puzzle together (C/O) code (E/K). Although encoded and constructive stand on the same line the hierarchy, social beats nonsocial.