Formative assessment has multiple meanings, but in NEE we use the term to refer to quick checks for understanding as the lesson is progressing. The purpose is to inform modification of teaching and learning activities in real time. Thus, it is information used to guide instruction as part of the instructional process.

Questioning is the most common form of this kind of formative assessment. Questioning helps teachers identify student knowledge deficits. However, other kinds of formative assessment might include solving problems on a whiteboard or answering spot quizzes with fist-to-five, thumbs up, or clicker techniques. While formative assessment improves achievement for most students, it may be more effective for low-achieving students. The National Research Council endorsed formative assessment as an important classroom activity.

In the classroom, this might look like:

- Teacher monitors the learning of the whole class and many individuals
- Teacher uses multiple checks for understanding
- Teacher monitors learning progress
- Teacher uses assessment for learning
- Teacher uses systematic monitoring of learning progress
- Teacher uses strategies such as questioning, whiteboarding, thumbs up, fist-to-five, observing student work, etc.
- On-the-spot assessment is seamless throughout instruction
- Strong, appropriate corrective action is taken to ensure learning of almost all students

In the early childhood classroom, the same look-fors are applicable, but the method of assessment may place greater reliance on informal teacher observation, portfolios, data tracking sheets and anecdotal notes. Teachers often cannot assess all 3-year-olds at once (although some activities may provide quick checks for understanding among all learners), so evaluators may focus on percentage of time rather than percentage of students. Assessment should be developmentally appropriate, may involve scaffolding, and be tailored to individual learner’s zone of proximal development.
Cognitive engagement in the classroom refers to students’ active mental involvement in the learning activities or mental effort, such as meaningful processing, strategy use, concentration, and metacognition. Cognitive engagement is different from behavioral engagement, which is cooperative participation, or adhering to classroom rules. Cognitive engagement is a key goal of many school reform efforts because it predicts achievement.

In the classroom, this might look like:

- Teacher incorporates appropriate learning and instructional strategies to encourage deep thinking
- Teacher supports students in monitoring their own levels of cognitive engagement
- Teacher recognizes if some students are not cognitively engaged, and tries alternate strategies to increase or maintain students’ thinking about content
- Teacher uses cognitive engagement strategies such as advanced organizers, K-W-L charts, share-out, shoulder-partner work
- Teacher cognitively engages students so that they are active in the lesson or activity
- Teacher is able to build activities appropriate for all depth of knowledge levels
- Teacher assesses student understanding often
Learning is a direct function of the amount of time students spend engaged in a learning task, relative to the amount of time they need to learn that task. Classroom management enables teaching and learning to proceed. Good classroom management increases instructional time. It includes being explicit about expectations, giving clear, detailed directions, dealing with inappropriate behavior promptly, and having a strong game plan for the class period.

In the classroom, this might look like:

- Teacher manages time and transitions well most of the time
- Students appear to know routines and procedures
- Students are mostly on task with only minor redirects from the teacher
- Teacher identifies common procedures, routines, and transitions and teaches those to students as part of a comprehensive classroom management plan
- Classroom management is so fluid that management is invisible
- Evidence indicates students know classroom routines and transitions
- Students appear to be self-directed

In the early childhood classroom, an adequate amount of quality materials are in the room (e.g., realistic, developmentally appropriate). Visual schedules are present and actively used. Transitions are well organized (e.g., with lights, cues, movement, music). Learning occurs during transitions. Learners are busy and active. Learners are involved in routines. Room is warm, inviting and organized.
Critical thinking refers to skillfully applying, analyzing, synthesizing, and evaluating information to reach an answer or conclusion. It is valued as an outcome of schooling because it is required in so many professions. Promoting critical thinking and problem-solving skills is difficult and fairly uncommon in typical classrooms. Yet there are a variety of ways teachers can promote critical thinking, such as giving students complex, demanding tasks that require persistent effort, concentration, and various cognitive and metacognitive strategies.

Tasks may require students to determine what makes an argument valid, assess possible solutions, categorize problems, map concepts, or explain a worked example. Teachers can promote critical thinking through deep-level questions, which prompt active processing of material, and highlight discrepancies that generates curiosity in students. Deep questions are more effective for helping students learn complex knowledge. Critical thinking is emphasized in the Common Core Standards.

In the classroom, this might look like:

- Teacher uses instructional strategies that promote student involvement
- Teacher uses engagement strategies that maintain or increase student thinking
- Teacher incorporates learning processes students can use to build prior knowledge into advanced applications
- Teacher develops questions that lead to deeper thinking and/or problem solving for students
- Teacher facilitates and organizes instruction to encourage problem solving
- Teacher requires students to justify their answers, weigh credibility of evidence, develop an informed argument, or ask higher-order questions, etc.