Developmentally appropriate assessment with infants and toddlers is an ongoing process teachers engage in daily, throughout the relationship with an infant or toddler, as they observe, document, reflect on, and then discuss with the family how to best support their child's development (NAEYC 2003; Zero to Three 2010). Appropriate assessment often includes conversations with families, anecdotal observations, portfolios, and more structured assessment tools.

Appropriate assessment of infants and toddlers is strengths based, identifying and building on children's capabilities, not what they cannot do, and is not used to "label" them (Moreno & Klute 2011). Meaningful assessment helps teachers and families focus on children's individual rates of development, temperaments, learning styles, interests, and preferences, while also taking into account families' goals and expectations and the broader norms and values of communities and cultures (Gonzalez-Mena & Stonehouse 2008).

Continuous assessment of infants and toddlers makes use of multiple and varied types of information. It is based on deep knowledge gained about the whole child in the contexts of early care and education settings and the child's family (Dichtelmiller 2004; Moreno & Klute 2011). Teachers are creating something like a biographical documentary, addressing the questions, "Who is this child, and who has she become over time?"
Regular, ongoing assessment occurs as a natural part of day-to-day life in the caregiving environment, as teachers interact with, observe, and celebrate the accomplishments of the infants and toddlers in their care (Dichtelmiller 2004; HighScope, n.d.). This article discusses elements that make up continuous assessment, including ways teachers can collect, document, organize, and maintain information; the importance of reflecting on this information in collaboration with colleagues and families; and how to use this information for setting goals and planning for individual children and groups.

Collecting and documenting information

It takes time and effort to record observations of infants’ and toddlers’ experiences and the interactions with the teacher and others in early care and education environments. With careful advance planning, however, it can be something that fits easily into the daily routine. The following are some general ways teachers can collect and record information.

Anecdotal observations

Teachers have many ways to record details of caregiving—small anecdotes and significant milestones in children’s development that they see in the classroom and that families share with them. Some carry notepads or sticky notes to jot down and date brief comments to expand on later, when they have time; others record information on dry erase boards or chalkboards strategically hung around the room. Some teachers find it disruptive to take notes when they are with the children and prefer to record observations about key events when children are napping or during their break.

In addition to recording caregiving routines such as when the child was fed, how much she ate, when her diaper was changed, and when and how long she slept, teachers typically record highlights and key events of each child’s day. For instance, a teacher may note that a toddler particularly enjoyed painting at the easel side by side with her friend.

Journals and blogs

Many teachers keep a daily or weekly journal to record their thoughts, consider discussions held with families and colleagues, reflect on their teaching, and sketch out plans for individual children and the group, the environment, and the curriculum. Family journals can be highly effective as well. Teachers can send home inexpensive spiral notebooks about once a week with photos, stories, samples of a child’s work, or other important information. In turn, families return these journals with questions or short descriptions of experiences from home. For example, families may send photos of their child’s first trip to the zoo, or perhaps provide comments or questions related to the work sample the teacher included in the journal that week.

Teachers have many ways to record details of caregiving that they see in the classroom and that families share with them.

If families have access to the Internet, teachers can use blogs and other interactive media for sharing information about individual infants and toddlers. Teachers can upload their reflections, as well as pictures and videos, connect families directly to important resources, and have online conversations with families. Teachers can set up blogs that are private between users—family members and teachers—and deny general public access, but must do all they can to ensure confidentiality by using secure settings and privacy features on blog sites.

Photo documentation

Digital cameras, including pocket cameras and cell phones, have become a popular tool for documentation in infant and toddler rooms. In an issue of *Young Children,* Julia Luckenbill (2012) demonstrated the effectiveness of using photos in reflective practice. Some teachers use photos they’ve taken throughout the week focusing on experiences the children and teachers have as a group. They then create a weekly poster that features each individual child. Digital photos convey a lot of information, and the images delight children and family members. However, teachers should ensure that the technology used in documentation enhances the ability to communicate the accomplishments of children, and does not substitute for personal interaction between teachers and families or teachers and children.

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Developmental screening
This type of screening uses valid and reliable standardized instruments or tests that are “normalized” or have reported averages based on large and diverse groups of children (Meisels, Wen, & Beachy-Quick 2010). Screenings are designed to identify children who may have significant developmental delays or disabilities. For instance, medical practitioners screen length, weight, and head circumference to make sure an infant is growing. Hearing and vision tests or verbal and receptive language screenings are commonly used as well (OHS 2011). Screening checklists can include items like, “The child points to and names familiar objects—(Always/Sometimes/Never).” Screenings may be completed by parents or teachers, medical or social service providers, or early intervention professionals. (See “Examples of Screening and Assessment Tools.”) Whether or not screening identifies a possible delay, it can provide a starting point for discussions with the family about the child’s strengths, interests, and needs. If caregivers suspect a child has a particular challenge, they should discuss it with the family and consider together whether to refer the child to the appropriate professional for formal evaluation (OHS 2011).

Structured assessment
Another assessment method is the use of a criterion-referenced developmental scale to monitor children’s progress. The most effective structured assessments are not “tests” teachers administer to all children in the same way, but are instead authentic assessments in that they rely on daily observations of children’s typical activities at home and in care. (See “Examples of Screening and Assessment Tools.”) The teacher uses anecdotal observations as reported by families to note the emergence of children’s behaviors and skills included in the scale. Tracking each child’s social, self-help, language, cognitive, and physical development through these types of assessments helps teachers collaborate with families, celebrate new milestones, and plan appropriate and challenging learning experiences for individual children. For example, a mother reports her 10-month-old son really seems to “follow her gaze” and pay attention when she points to the bird feeder outside the kitchen window, signaling to the teachers that the baby is ready to attend more closely to objects teachers point out and label in board books and on daily buggy rides.

Before using a structured assessment tool, teachers should examine it carefully, making sure the skills measured are a good match with the program’s philosophy for children and families. For example, teachers can make sure the skills listed in the assessment are ones considered important by the program and its families. They can also ensure the skills are observable in the child’s everyday activities at home and in the program.

Organizing and maintaining records
For daily record keeping, simple systems such as individual expandable file folders, bins, boxes, or baskets labeled for each child are handy for depositing anecdotal records, notes, photos, and structured screening or assessment forms. Some teachers prefer large binders with pockets and plastic sleeves for collecting and maintaining daily reports and information. Increasingly, teachers are combining physical paper records with electronic systems to file notes, photos, assessment results, and videos.

Periodically, caregivers need to take what they’ve learned and all of the loose bits of information they have

Examples of Screening and Assessment Tools

**Developmental Screening Instruments**

- **Ages and Stages Questionnaires:** Family-completed screening checklists with age-appropriate items for children 1 to 6 months. www.brookespublishing.com/resource-center/screening-and-assessment/asq/

- **BRIGANCE Early Childhood Screens:** Teacher-administered screen for children birth to 36 months takes 10 to 15 minutes to cover language, motor, self-help, social-emotional, and cognitive skills. www.curriculumassociates.com/products/detail.aspx?title=BrigEC-IED3

- **Denver II:** Screener designed for health care providers or teachers to gain a quick assessment of a child’s skill levels relative to norms, for children birth to 6 years. http://denverii.com/denverii/

**Classroom Assessment Tools**

- **AEPS (Assessment, Evaluation, and Programming System):** A linked system that provides teachers with skills to observe children birth to 6 years (gross motor, fine motor, adaptive, cognitive, communication, and social) and curriculum ideas to meet identified needs. http://aepslinkedsystem.com/index.html

- **BRIGANCE Inventory of Early Development III:** Teacher-administered assessment tool for children birth to 35 months that covers physical development, language, literacy, mathematics and science, social-emotional development, and daily living. www.curriculumassociates.com/products/detail.aspx?Title=BrigEC-IED3

- **Teaching Strategies Gold:** Ongoing observational system for children birth through 6 years, available in paper form and online. www.teachingstrategies.com/page/assessment-early-childhood-overview.cfm

- **The Ounce Scale:** Observational scale for children birth to 3½ years, for use by professionals to monitor development and inform parents, including personal connections, feelings about self, relationships with other children, understanding and communicating, exploration and problem solving, and movement and coordination. http://psychcorp.pearsonassessments.com/haiweb/cultures/en-us/productdetail.htm?pid=PAaOunce&Community=CA_Ed_Al_Early
collected and put it all together in a meaningful way to share with others. Sometimes this is in preparation for conferences with families or perhaps to prepare documentation for accreditation or another required report. Portfolios and developmental profiles are the most common forms for pulling all of the information together for individual infants and toddlers (Jarrett, Browne, & Wallin 2006). Teachers can use online resources as well as books to help guide them in portfolio construction.

**Portfolios**

Portfolios support a strengths-based approach to assessment by serving as a means to collect and showcase children's abilities. “Portfolios may contain collections of representative work of children that illustrate their progress and achievements” (Gestwicki 2010, 304). Teachers can use a variety of formats to create portfolios—boxes, binders, or electronic files—but the important thing is that each portfolio is unique in telling the story of an individual child. The following are items teachers typically put in portfolios: carefully selected photographs; audio- and videotapes of children playing and experiencing life indoors and outdoors; samples of children's work, such as paintings, scribbles, and collages of leaves, pebbles, and twigs; teacher reflections; and screening and assessment reports.

**Developmental profiles**

Developmentally appropriate practice reminds us to look at the whole child, not just isolated abilities or areas of development (Copple & Bredekamp 2009). It is useful, however, to organize observations and records around commonly recognized areas of development and learning for this age period. Observations, anecdotal records, and communications are often broken down into manageable parts or categories, such as social-emotional development; physical development; development of communication, language, and literacy; cognitive development and the development of critical thinking skills; and the development of self-help and personal care skills.

Developmental profiles provide a framework for organizing the various pieces of evidence (e.g., anecdotal notes, reflections, assessment results) collected by teachers to help them describe a child's progress across several developmental categories over a period of time (CDE 2010). Teachers in high-quality infant and toddler programs typically compile developmental profiles for each child two or three times each year to share in conferences with families. Teachers and families discuss this document and use it to collaborate on goal setting. (See page 27 for an example of a developmental profile.)

**Collaboration and reflection**

Family-centered infant and toddler teachers form partnerships with families in supporting healthy and positive outcomes for their children (Keyser 2006). Partnership is the key—it is a true working collaboration in which the expertise of families is respected. Making time for reflection, as well as communicating, is central to this collaborative relationship.

Teachers can support this collaboration by taking time to reflect on information gathered about the infants and toddlers in their care. Processing thoughts about observations, interactions, and experiences over time allows various pieces of the puzzle to fall into place. Initial conclusions and beliefs formed when observing children—ideas about what a teacher sees and understands—need to be discussed openly with colleagues and, even more important, with families (Gonzalez-Mena & Stonehouse 2008; Zero to Three 2010).

For example, it is important for teachers to hold formal conferences a minimum of two or three times each year for teachers and families to share information. Teachers also
can make the most of daily drop-off and pickup times by asking questions and sharing information with families and inviting feedback, especially as such an exchange impacts immediate goal setting and plans for individualized care.

All who engage in collaborative reflection benefit from sharing information about an individual infant or toddler—or the group as a whole. Missing pieces of knowledge are filled in, incorrect assumptions corrected, and alternative conclusions generated—and everyone comes away feeling part of the decision making. This critical part of the assessment process respects the multiple concerns and perspectives of all of those who are part of the infant and toddler caregiving team.

For example, a family might ask teachers to support their efforts to potty train their 1-year-old. Instead of rejecting the request or making a culturally based assumption that “no 1-year-olds can do this,” the teachers can engage in a discussion with the family to find out why it is so important to them. Teachers might discover that the family is returning soon to their home country, where the baby will be expected to have this skill, and they fear embarrassment. After a discussion with the family about their method of supporting early toilet learning, the family and teachers can consider how to adapt and incorporate toilet learning into group care for their child.

Planning and goal setting
Planning and preparing new experiences for individual infants, toddlers, and groups are the final key elements of ongoing assessment. The shared conclusions that teachers and families reach through ongoing assessment and a collaborative relationship help them define goals. Using a thorough assessment process with multiple inputs and perspectives ensures that new experiences are based on reasonable expectations and will be at a pace appropriate for each child (Gonzalez-Mena & Stonehouse 2008; HighScope, n.d.; NRC 2008). For example, the teacher and parents of an infant may decide together that they would like to encourage his independent exploration—out of the arms of the adult caregiver. They set a goal for both home and child care settings of putting the baby on the floor with toys, with the adult sitting next to him for support, and over many days scooting farther and farther away as the baby learns to play contentedly by himself.

It is important to plan to be responsive to individual infants and toddlers while also meeting the needs of the group. Plans arise naturally when teachers engage in continuous assessment, carefully organize and maintain children's records, and mindfully reflect on this information among themselves and with families.

Final words
Assessment in infant and toddler settings is a planned, everyday process based on strong positive relationships, built on shared commitment among teachers, children, and families. Engaging in this process helps everyone work together to support the healthy development, learning, and well-being of infants and toddlers.

References


Selected Excerpts from a Developmental Profile Assessment for a Family Conference for Bailey, Age 2½ Years

This developmental profile is based on information gained from screenings and shared by the family, anecdotal records and journal entries (from teachers and family), captioned photos, and daily reports about activities such as eating and toileting.

**Social-Emotional Development:** Understanding of self and others; the development of responsibility, interpersonal skills, and the management of emotions.

Bailey is very social and displays many prosocial skills. We’ve seen empathy in the way he reacts when children are crying; he often asks, “They OK?” Although he still prefers to play with materials (particularly trains) undisturbed, he’ll seek out interactions with peers, as when he engaged in playing dress-up with two friends. He’s often heard explaining that “my mommy come back, my daddy come back,” a phrase that other children repeat using Bailey’s speech patterns. Bailey follows along very comfortably with familiar routines and rules, and is not thrown off by the unexpected, as demonstrated during a recent tornado drill.

**Development of Critical Thinking Skills:** Ability/persistence in problem solving, desire to learn, creative expression (art, movement), mathematic skills, scientific inquiry; enjoyment in learning.

Bailey has shown much development in his critical thinking skills since beginning in our program. He loves to explore, such as using the magnifying glass to look at “big bugs.” His emerging mathematical skills are a clear example of this—he loves to line up cars and point to each one, counting quietly to himself. He groups objects by concrete similarities, and the attributes he uses for grouping are becoming more complex (first similar objects, then similar function). For example, he recently lined up the wooden people and matched different sets of people. Also, he works with puzzles, using trial and error to problem solve. Often Bailey’s first instinct is to cry out to get an adult to fix a problem for him. Teachers and parents can encourage Bailey’s problem solving by encouraging him to work through problems, providing suggestions and emotional support.

**Physical Skills Development:** Use and storage of sensory information; physical stability, and large and small muscle use control.

Bailey shows above average physical development for his age. When Bailey is familiar with materials and surroundings, he freely explores sensory materials and is comfortable working with messy materials such as paint and shaving cream. In new situations he uses familiar caregivers to assist him in regulating sensory input, like when the class watched the construction site outside of the playground fence and the teachers needed to help Bailey manage his fear of the large equipment and loud noise. He is at ease using his hands and fingers to do messy, fine motor activities such as using squirt bottles, pinching the bulb of the eye dropper, squeezing and shaping modeling clay, and hammering pegs. He demonstrates physical stability, jumping off the small loft and landing on his feet and walking around the bike track pushing a stroller.

**Development of Self-Help and Personal Care Skills:** Capacity to take care of personal needs; acquiring age-appropriate independence when eating, toileting, dressing, and completing hygiene tasks.

Bailey demonstrates competence in several key personal care skills. First, he has completed all major self-feeding tasks for a child his age and beyond. He takes bites and chews food with his mouth closed, drinks from an open cup without spilling, and successfully uses utensils without spilling food. He assists in dressing himself and there are pieces of clothing like hats that he is capable of putting on and taking off without help. Bailey also shows competence in the care of his hands, face, and nose, and he participates in frequent hand washing and the use of tissues when necessary. Lastly, while Bailey does not show the interest in toilet use at school that he does at home, he willingly participates in diaper changes.

**Development of Communication, Language, and Literacy:** Ability to communicate effectively with words, signs, and symbols; enjoyment/use of printed materials.

Bailey has shown considerable growth in his vocabulary and use of language over this past year. Nine months ago, he was speaking in one- and two-word sentences. For instance, he would stand at the sink in the bathroom and ask for “more” and point at the paper towel dispenser. Now Bailey tells complete stories and will readily talk to the teachers about what he needs. Activities that he has participated in, like blowing bubbles and singing, have helped support his fluency and build his vocabulary and expressive language skills. He can also do these activities at home. Bailey also shows an interest in printed material. He frequently requests to be read to and participates in group story times (he loves it when we listen to the book on tape, The Ants Go Marching!). He looks at books independently, and he knows the purpose and proper use of writing materials.

**Conclusion**

Overall, Bailey shows many skills expected of a 2½-year-old. He is interested in peers and seeks out interactions with them. He shows a desire to learn, pursuing his own interests as well as participating in planned activities. He engages in many literacy activities, such as reading independently and with teachers, and uses writing tools like markers and crayons. He often practices the use of self-care skills like attempts at toileting or hand washing. Bailey displays creativity in terms of his art, body movements, and imaginative play as well as engaging in many math skills, like sorting and matching. Based on teacher observations and the reporting tool developed by the state Department of Education to help guide understanding of development, Bailey displays average and above average skills for a child his age in all skill areas.