The Benefits of User-Friendly Data Collection: Effective Preschool Assessment Practices

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Appropriate early childhood assessment is “an ongoing process of observing, recording, and otherwise documenting the work young children do in their natural learning environments” (NAEYC, 1998, p. 1). Assessment tools should be developmentally, culturally, and linguistically appropriate for children and should be tied to children’s daily activities. Assessments should be undertaken in a manner that is ongoing, systematic, and should include both formal, and informal data collection that provides information on children’s development and learning. Whenever possible, children’s development and growth should be observed in multiple, meaningful contexts and daily activities rather than solely assessing skills using pull out one-on-one testing (Jones, 2004). This view of early childhood assessment is based on previous research that demonstrates that children are generally more knowledgeable and capable at tasks and activities that are closely tied to their everyday lives (Ebeling & Gelman, 1994; Gopnik & Slaughter, 1991; Lagattuta, Wellman, & Flavell, 1997) and to the importance of assessing the child’s “whole” development rather than a more narrow set of skills, such as literacy and mathematics knowledge (Meisels & Atkins-Burnett, 2004). With this in mind, we advocate six principles that should guide effective preschool data collection.

1. **Identify Appropriate Preschool Abilities and Skills**
   a. Basic preschool skills should be introduced in developmentally appropriate order.
   b. Determine the correct preschool skills according to the child’s age.

2. **Provide Skill Development on the Level the Child is Functioning**
   a. Skill development should occur at the developmental stage of the child.
   b. Children should not be forced to participate in skill activities that are beyond their developmental level.

3. **Provide a Comprehensive Tracking System for Skills**
   a. Authentic tracking should include informal assessments and observations.
   b. Authentic tracking should include anecdotal records.
      (See NAEYC Accreditation Standard # 4)

4. **Authentic Assessment Should Also Include Formal Assessment**
   a. Appropriate Formal assessment should be part of a good preschool program.
   b. Formal assessment in language, literacy and math tracks development of these skills and compliments informal observations and ratings of child behavior.

5. **Create an Easy Reference**
   a. Create an easy reference for “at a glance” basic decisions making.

6. **Use Assessment Data to Inform Instruction**
   a. Planned activities should reflect the results of assessment and tracking.
   b. Each activity planned should have a corresponding guideline or skill.
The Preschool Observation Checklist and Evaluation Tool

The Preschool Observation Checklist and Evaluation Tool (POCET: Excelligence Learning Cooperation, 2005) is a preschool assessment that is designed to yield data about children’s growth and development. POCET is a teacher observation tool designed that assesses development in the following domains (i.e., literacy, mathematics, social & emotional, creative arts, approaches to learning, science, and physical health) on a 3 point scale (“not evident”, “needs support”, “competent”). Each developmental domain contains multiple items for the teacher to rate the child’s acquisition of skills in that domain. POCET also contains a direct, teacher administered, assessment tool that explicitly examines children’s literacy (i.e., phonological awareness, letter knowledge, and print awareness) and mathematics knowledge (i.e., patterning, counting, geometric shapes).

To examine the reliability and validity of POCET we followed 192 diverse preschool children’s development for a year. Results suggest that all developmental domains featured in the teacher observation portion of POCET evidenced high internal consistency (α = .91 to .95). Unfortunately, difficulty arose when determining the discriminate validity of the POCET instrument, which is common among preschool assessment instruments. An exploratory factor analysis showed that almost all observation items loaded on a single factor that we deemed “academic competence”. A second factor, deemed “physical development”, contained 5 items that assessed teacher rating of children’s physical motor skills. Although issues concerning the discriminate validity of the POCET exist, it should be noted that teachers’ ratings of children’s performance were significantly positively related to direct assessments conducted by the teacher as part of the POCET assessment packet. For example, teachers’ ratings of children’s literacy skills were significantly positively correlated to direct assessments of such skills using the teacher administered POCET assessment (r = .51). Similarly, teachers’ ratings of children’s mathematical knowledge and skills was positively related to direct assessment of such skills (r = .48). Importantly, the relation between teachers ratings of math or literacy skills were more strongly related to their respective direct assessments (i.e., math ratings related strongly to math skills) than to other skills.

Finally, an examination of teachers’ ratings of the ease and viability of the POCET tool for use in early childhood classrooms reveals that teachers found POCET easy to use, understandable, and felt like it gave them useful intervention in planning instruction. Further, teachers found rating scale, direct assessments, and file folder system extremely helpful in understanding how each child progressed during the year.