Linking Assessment and Instruction: Implications for a Comprehensive Assessment System

Recommendations for Assessing Children with Disabilities

Kristie Petti-Frontczak, Ph.D.
Bonnie Keilty, Ed.D.

B2K Solutions℠ Ltd.
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Introduction

Over the past few decades, there has been an increased emphasis on accountability and the need for strong evidence of child progress for the expenditure of tax dollars (Government Performance and Results Act, 1993; Individuals with Disabilities Education Act, 2004; Meisels, 2007). This has resulted in a call for a comprehensive assessment system that addresses multiple purposes of assessment. Two such purposes, or decisions, are program accountability (“how effective is the program”) and assessment for instructional planning and progress monitoring (“how should each child be taught and has the child made progress”). A major hurdle in substantiating and validating the case for early learning and, what many term school readiness, is the lack of measurement instruments and procedures that can be relied upon to consistently produce scores that accurately reflect young children’s current developmental status as well as to reliably monitor important changes following intervention efforts (Meisels & Atkins-Burnett, 2004; National Research Council, 2008). What is needed, particularly since assessment practices must be appropriate for all children, including those with disabilities (Bagnato, Neisworth, & Pretti-Frontczak, 2010), is a more comprehensive and linked approach to assessment that, as a whole, results in information to meet multiple purposes, avoids viewing assessment as a point-in-time test, and utilizes assessment as a critical component of quality instruction.

Assessing Children with Disabilities

A comprehensive early childhood assessment system must follow known standards for quality and ethical assessment practices, including those for children with disabilities (Luke & Schwartz, 2007). At the core of any child assessment is the need to use instruments that are technically adequate (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 1999) and have been designed and validated for the purpose for which they will be used. Bagnato and colleagues (2010) have identified eight assessment standards that are grounded in research (Andersson, 2004; Hallam, Grisham-Brown, Gao, & Brookshire, 2007; Meisels, Atkins-Burnett, Zue, Bickel, & Son, 2003), recommended practice (DEC, 2007; NAEYC & NAECS/SDE, 2003; Schultz & Kagan, 2007), and professional wisdom (Ackerman & Coley, 2012; Brassard & Boehm, 2007; Pretti-Frontczak & Brewer, 2005). Several aspects of the standards address the need for universally designed items and procedures where children are
able to demonstrate their underlying and often unrealized functional capabilities (Johnstone, Altman, & Thurlow, 2006). This is especially needed for children with disabilities whose abilities can be undetected unless assessment practices allow for various ways of representing competence and individualized to a child’s unique learning characteristics. According to Grisham-Brown and Pretti-Frontczak’s (2011) review of the research, assessments for any purpose should be equitably designed so that:

| Children can demonstrate competence using a variety of expressions (verbal and nonverbal). Children aren't penalized due to culture, language, or individual differences, making modifications or adaptations unnecessary. In other words, children are allowed multiple and alternate ways to show their competencies despite sensory, physical, behavioral, social/emotional. Linguistic, and/or cultural differences. Emphasis is on the function of the child's performance rather than topographical content or form (p. 177). |

Lastly, and perhaps most importantly, the Individuals with Disabilities Education Improvement Act (IDEA), 2004, and other federal laws prohibit the use of assessment methods that are discriminatory. The decisions made based on assessment results often have a significant impact on the lives of young children and their families and thus must be culturally, linguistically, and individually non-biased (Grisham-Brown & Pretti-Frontczak; Snow & Van Hemel, 2008). These practices are not specific to children with disabilities, but are recognized as critical components of a quality, comprehensive assessment system in which valid and reliable data are linked to the decisions being made by those data.

**A Comprehensive Assessment System for Accountability and Programming**

A linked approach to assessment is designed to ensure assessment results are connected to interpretations to guide teams in determining what to teach and how best to teach. Similarly, instructional efforts are connected to a schedule of progress monitoring that allows for timely and data driven decision making to determine how to revise instruction as children either do or do not make expected gains. Such a linked approach is comprised of four steps including (1) assessing all children across important developmental and curricular indicators, (2) interpreting assessment findings and sorting children’s needs, (3) aligning intentional instruction with identified needs of groups of and individual children, and (4) monitoring progress at designated intervals to revise instruction to maximize effectiveness (Grisham-Brown & Pretti-Frontczak, 2011). While an underlying premise of a linked approach to assessment is formative and designed to plan and revise instruction, it also allows for summative evaluation where, at designated points in time, a child’s performance can be documented for such activities as federal reporting toward child outcomes, such as IDEA early childhood outcomes, or kindergarten entry assessment. This provides measures of accountability as part of a comprehensive system of assessment. For example, State Part B, 619 programs (i.e., preschool special education programs) are
required to report to the Office of Special Education Programs (OSEP), US Department of Education child progress on three functional outcomes:

1. Positive social-emotional skills, including social relationships
2. Acquisition and use of knowledge and skills, including early language/communication and early literacy
3. Use of appropriate behaviors to meet their needs.

These outcomes were specifically designed to reflect child functioning within everyday activities and allow for various ways of expressing competence, as opposed to milestones within specific developmental domains (Hebbeler & Barton, 2007). While the purposes of accountability assessments as program-level outcome indicators differ from the purposes of assessments to make decisions about instructional programming, expected properties of quality assessment methods as described above are the same. Additionally, envisioning the next generation of assessment tools to inform accountability, Hebbeler and colleagues (Hebbeler, Barton, Taylor, & Spiker, 2011) recommend that any designed tools utilize authentic methods to measure everyday child behaviors, adhere to universal design that permits multiple ways to demonstrate functional competence that crosses developmental domains, span the entire birth to 8 years age range, converge data from multiple sources and methods, and ensure sufficient item density to measure varying increments of progress depending on an individual child’s learning path. With these qualities in place, accountability assessments can be easily embedded into a linked, comprehensive assessment system that meets multiple purposes.

A Linked Approach

The remainder of this paper describes the four steps to a linked assessment approach as well as the benefits for key stakeholders (i.e., state departments, families, teachers, and children with disabilities). Figure 1 provides an illustration of the four steps of a linked assessment approach. The first step is the administration of a formative assessment from which to make decisions. The three triangles represent the next three steps -- sorting, delivering instruction, and progress monitoring. Further, each triangle (i.e., step) is divided into three tiers. Across the triangles, tier 1 (the bottom tier) represents quality practices and decisions that are applicable and available to all children. Tier 1 is purposely depicted as wider than tiers 2 and 3 to symbolize its function as the foundation for other practices, and it is proportionally deeper than tiers 2 and 3 to indicate that more intensive support or instruction are less likely to be necessary if high-quality tier 1 decisions and practices are in place. Similarly, tier 2 is depicted as proportionally deeper than tier 3 to indicate that the added implementation of effective tier 2 practices reduces the need for highly individualized tier 3 efforts (Division for Early Childhood, National Association for the Education of Young Children, & National Head Start Association, 2013).
Figure 1. Illustration of a linked assessment approach including formative and summative data for planning/revising and accountability.

**Step One: Administering Authentic Assessment Methods.** A linked approach begins with engaging in assessment methods that meet recommended practice standards for planning/revising instruction, and are capable of assessing all children, including those with disabilities and dual-language learners (Grisham-Brown & Pretti-Frontczak, 2013). Authentic assessment refers to practices conducted by teams comprised of familiar adults (including families), in familiar settings, with familiar objects, and by asking the child to engage in familiar activities. Such information is deemed not only developmentally, individually, and culturally appropriate, but allows for the most accurate depiction of a child’s performance and can be done within the context of ongoing daily events and routines (i.e., incorporates universal design features). To guide authentic assessment practices, team members often utilize a specifically chosen instrument that can be applied in authentic contexts and provides graded variations of underlying, functional competencies, reflective of early learning standards. Such an approach allows for a continual, iterative process of assessment, instruction, and progress monitoring. The formative assessment instrument currently in development for Maryland and Ohio is comprised of a series of learning progressions (or indicators), which address all aspects of early learning and development and are aligned to state early learning standards. To be an effective component of a comprehensive assessment system, this instrument will need to utilize various measurement techniques (Grisham-Brown, Hallam, & Brookshire, 2006; Grisham-Brown, Hallam, & Pretti-Frontczak, 2008) by including observable and measurable criterion for each indicator, directly linking findings to instruction, sequencing indicators for easy comparison to a normative sample or benchmark of expected performance, including only indicators known to be highly predicative of later success, spanning development from birth to 78 months, and allowing for repeated administrations to measure performance over
time. Further refinement of the instrument will ensure full coverage of the entire age range to accommodate children of diverse abilities, confirm those necessary components outlined above are indeed reflected in the instrument, and enhance the specificity and quality of expected performance so teachers can discriminate child competence and progress within as well as across benchmarks. This age range would also ensure a comprehensive early childhood assessment into school entry.

**Step Two: Interpreting and Sorting.** Following assessment administration, the team interprets the assessment findings to determine (1) which children already have all of the important age-expected skills or indicators, (2) which children might be at risk or missing a component of one or more expected skills or indicators, and (3) which children may not yet have the skill or indicator due to missing critical foundational and/or prerequisite behaviors. Step two serves as the bridge from assessment to instruction. Interpretations of assessment findings lead to the sorting of children across what will become parallel tiers of instruction (Snyder, Wixson, Talapatra, & Roach, 2008). As in step one, the needs of all children, including those with disabilities and dual-language learners, are approached in the same manner to determine what skills or indicators require what type of instruction.

At step two, for children with identified/confirmed disabilities, teams also need to determine which outcomes are appropriate for individualized education program (IEP) goals. IDEA (2004) and the literature repeatedly include statements that children’s IEP goals should not be a restatement of the general curriculum. Rather, IEP goals should ensure children with disabilities access, participate, and make progress toward the general curriculum. Thus, a child’s IEP goals would not be comprised of critical indicators assessed at step one and then sorted onto the bottom tier of Figure 1. The bottom tier reflects what all children are striving to learn. Further, only after careful consideration would IEP goals be generated for children’s needs in the middle tier. Lastly, while a child’s needs are associated with the top tier of Figure 1, the team must still determine the eventual IEP goal based upon a need resulting from the child having a disability, how that need is having an adverse effect on the child’s access, participation, and progress, that the child will be able to acquire and use the skill in the IEP goal within a year’s time, and that the skill requires specially designed instruction above and beyond quality educational practices expected of any early childhood classroom. Therefore, IEP goals reflect the child’s individual needs to be successful within the general education classroom and curriculum. These goals, along with the formative assessment results, guide the team when sorting and delivering tiered instruction to address specific learning progression(s).

**Step Three: Delivering Tiered Instruction.** Once a team identifies each child’s current abilities in relation to expected performance, they deliver related and intentional instruction tailored to that child’s needs. Specifically, when a child or a large group of children are found to be on target for a particular indicator, the team provides common, quality, evidence-based instruction that is designed to continue their success (i.e., bottom tier). When a child or a small group of children are found to be at risk or struggling within a desired indicator and therefore not on target for their development and learning, the team then provides more targeted instruction, not on the original indicator, but on dimensions or related skills that address the root of the concern (i.e., middle tier). Additionally, the team does not teach the same skill more often or in a different location. The purpose of targeted
instruction is to address the underlying struggles for the child that, when addressed, are no longer barriers to learning the identified indicator. Lastly, if individual children are missing a foundational or prerequisite behavior (something that should have been acquired much earlier in development), the team can provide highly individualized, intensive, and intentional instruction on a behavior that will eventually lead to access, participation, and progress toward the common outcomes for other children their age (i.e., top tier). Note children are not wholly placed in one tier or another, but instruction for each specific learning progression, or indicator, for the particular child is sorted onto a specific tier. As for any child, a child with a disability can have specific indicators at tier one, other indicators at tier 2, and others at tier 3. Or, all indicators can be in the same tier. These decisions are made based on the individual child and with guidance from the formative assessment.

**Step Four: Monitoring Progress.** Just as quality instruction is differentiated, so too should progress monitoring efforts (Pretti-Frontczak, Bagnato, & Macy, 2011). For example, teachers need to monitor progress less frequently and deeply for the indicators on which children are performing as expected, and need more specific information at a more frequent rate on individual behaviors that are missing and keeping the child from independently functioning, accessing the general curriculum, and participating in daily events. For the groups of children who are on track, teams only need to re-administer the assessment instrument comprised of the critical indicators 2-3 times a year (e.g., every three to four months). It is expected that with the passage of time (i.e., typical maturation) and quality instruction, these children will remain on track. For targeted indicators for which a child shows risk of falling behind or was struggling to maintain adequate growth, progress monitoring may need to occur on a monthly or even weekly basis. With appropriate, targeted instruction, children who are struggling to “keep up” should make rapid improvement and the level of monitoring can be considered temporary as the child should “catch up” and then be monitored during the next cycle of all assessment indicators. Lastly, for individual children whose learning needs require individualized instruction, hourly or daily progress monitoring may be needed to track small increments of improvement on specific behaviors that are aligned to the common outcome and IEP goals (Grisham-Brown & Pretti-Frontczak, 2011).

With a linked assessment approach, children with disabilities will fully participate and efforts to lessen the achievement gap will have been made, particularly when teams sort children’s needs, deliver tiered instruction, and systematically revise efforts to ensure success toward critical indicators. Additionally, teams will be supported in efforts to apply data-driven instructional decisions while at the same time meeting accountability mandates. Lastly, state stakeholders will have both formative and summative data needed to ensure quality instruction as well as track large groups of children’s progress toward early learning standards at various points in time.
References


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