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Authentic Assessment: Establishing a Clear Foundation for Instructional Practices

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Abstract

As children transition from Early Childhood Intervention Services (ECI) to public education, it is critical that the results from the assessment practices used to identify children for services in public education are translated into instructional techniques that early childhood educators are able to implement in the classroom setting. The purpose of this article is to describe best practices in assessment of young children who are transitioning from ECI to public school services with specific emphasis placed on authentic assessment, and the potential benefits of this type of assessment as compared to traditional standardized assessment practices.

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Jonas is a sweet 3-year-old little boy who loves trucks and snakes. Jonas was recently diagnosed with autism. Jonas and his parents have been participating in early intervention services for the past year, and are ready to transition to a preschool setting. Mrs. Walter is the early childhood special educator who has received Jonas’ file, and she and her team of providers have met with Jonas and his parents and are in the process of determining the best approach to assess Jonas before his entry into preschool. Mrs. Walter has a variety of standardized assessment tools that she has used many times in the past, but she is wondering if perhaps there isn’t another approach to assessing Jonas that will allow for direct translation of assessment results into individualized supports for him.

In the United States, infants and toddlers with disabilities or who may be at risk for disabilities are provided services under early childhood intervention (ECI) until the age of three at which time they “transition” to public education services as required by the Individuals with Disabilities Education Act (IDEA, 2004). This transition from ECI to public education for children with disabilities, like Jonas, and their families, can be a stressful and overwhelming process (Malsch, Green, & Kothari, 2011). The transition for Jonas and his family will mean a change not only in the setting in which services are provided, but also a change in the people who are providing those services. Mrs. Walter and her team recognize and understand the importance of making this as smooth of a transition as possible. Early intervention for children with autism is one of the most effective means of improving long term academic and social outcomes (National Research Council, 2001), with the ultimate goal of possibly preventing school failure.
Children who receive services during their preschool years are better able to face the academic and social challenges they will encounter as they move into the elementary years. However, the key is to ensure that the supports put into place during the preschool years are derived from sound assessments and are appropriate for the child’s individual needs.

As children transition from ECI to public education, it is critical that the results from the assessment practices used to identify children for services in public education are translated into instructional techniques that early childhood educators are able to implement in the classroom setting. Therefore, the purpose of this article is to describe best practices in assessment of young children who are transitioning from ECI to public school services with specific emphasis placed on authentic assessment, and the potential benefits of this type of assessment as compared to traditional standardized assessment practices. We will begin by discussing the concept of authentic assessment and its role in the overall assessment approach used by early childhood special education service providers. Next, we will outline a specific type of authentic assessment, play-based assessment and how the results of this assessment can be used to guide program planning. Jonas, his family, and the service providers that are supporting his transition will be highlighted throughout the article as a means to illustrate the process of authentic assessment at the early childhood level.

**Authentic Assessment**

For many years, the use of standardized, norm-referenced tests was the preferred method of determining eligibility for services as well as assessing children’s progress. Recent research has suggested that use of standardized, norm-referenced tests to identify
young children with delays and/or for eligibility determination is flawed, and does not inform treatment efforts or instruction (Bagnato, Macy, Salaway, & Lehman, 2007; Macy & Bagnato, 2010). A promising alternative to standardized, norm-referenced tests is the use of authentic assessment. Authentic assessment (also known as play-based, naturalistic, and performance-based) is the collection of information, by familiar and knowledgeable caregivers, regarding a child’s behavior and functional abilities as they are naturally occurring (Bagnato & Yeh-ho, 2006; Grisham-Brown, Hallam, & Pretti-Frontczak, 2008). Information obtained from authentic assessment can provide a collective picture of a child’s strengths and weakness in addition to presenting children with opportunities to apply their knowledge and skills in real life contexts (Warner, Lynch, Nabors, & Simpson, 2008).

Authentic assessment allows for not only familiar adults to be a part of the process, but also familiar events and materials as well. Results from an authentic assessment can be used to directly inform program planning, curriculum, instruction, and lesson plans (Macy & Bagnato, 2010). Following are descriptions of two key aspects of authentic assessment, interviews and observations.

Interviews

The use of interviews as part of authentic assessment has proven beneficial in developing a complete view of child’s abilities across settings. Authentic assessment depends on the input of all key adults in the child’s life to provide convergent data on the child’s functionality throughout their day. All of the adults know the child well and have knowledge regarding the child’s skills and abilities. In our example, the most important individuals in Jonas’ life include parents, a home child-care worker who is close to the
family, and the ECI service providers who have worked with this family over the past year. The perceptions as well as pertinent background knowledge from varied sources can help Mrs. Walter and her team gain further insight into Jonas’ development, which can also assist in goal writing.

With regard to Jonas’ parents, there will be several things for Mrs. Walter to keep in mind when planning and conducting the interview. She will want to schedule the interview at a time and place that is convenient, and remain sensitive to their individual needs. Given Jonas’ recent autism diagnosis, his parents have many questions about what this will mean for Jonas and their family. Therefore, Mrs. Walter will need to come prepared to address these concerns. Mrs. Walter will want to gather information through both structured and unstructured questions. An example of a structured question is, “What are some of Jonas’ favorite activities or toys at home?” while an example of an unstructured or more open-ended statement could be, “Tell me about Jonas.” She will want to take a conversational approach to the interview and use more open-ended questions until she is able to foster a relationship with the parents and transition to more structured questions. Mrs. Walter will need to make the purpose behind the interview clear to the parents, summarize what the parents say to ensure she is accurately interpreting what they say, and discuss the family’s priorities in relation to the child’s needs (Banks, Santos, & Roof, 2003).

Observation

In addition to interviews, observations of the child across settings allows assessment personnel to gather a more complete view of the child in his or her most naturalist environments. At the heart of authentic assessment is the notion of natural
observations of a child’s response to daily routines. During natural observations, children are able to demonstrate competency in a variety of different ways (Neisworth & Bagnato, 2004) because at any given time, they can be showing what they know, what they like, and where they struggle. Given that Jonas attends child-care 3 days a week, it will be critical that Mrs. Walter and her team conduct observations at both the child-care center and Jonas’ home where he lives with mother and father. Before conducting observations, the team must decide who will be responsible for collecting what kind of information. A clear definition of the exact behaviors and skills each of the team members will be looking for provides a more effective and efficient means for gathering information. For example, Mrs. Walter as the early childhood special education provider may be looking for social behaviors such as transitioning between activities and willingness to include others in play. The speech-pathologist may be looking for articulation and fluency of speech. Lastly, the occupational therapist may be looking at motor planning and coordination (a plan for and actually accomplishing a task).

Because formal data collection during observations is a key piece of the authentic assessment process, Mrs. Walter and her team may consider using a variety of procedures to gather information. For example, written descriptions such as running and anecdotal records, ABC (antecedent, behavior, consequence) analysis, and permanent products or portfolios. Let’s take a look at each of these procedures in more detail.

Running records. By definition, a running record is an observational technique that focuses on a sequence of events that occurs over time. Running records allow for detailed insight into behavior in a specific situation or event that is occurring over a period of days or weeks. It is critical for teachers who are conducting this type of
technique to remain as objective as possible, that is, focus on the observed behavior without implying judgment. Teachers should also make a point to include in their running record the following information: (a) date and time of the observation, (b) names of the children involved, (c) location of the incident (e.g. lunchroom, hallway, bathroom), and (d) what the children said and exactly what they did (Clay, 2000). Figure 1 provides a sample running record for a book reading activity between Jonas and his parents.

Anecdotal records. While running records are often lengthy, anecdotal records are short descriptions of incidents, or anecdotes involving one or more children (McAfee, Leong, & Bodrova, 2004). Anecdotal records allow for insight into a particular behavior and provide a basis from which the teacher can design a targeted strategy for a child or group of children. Again, the teacher would want to include the setting of the event (i.e. date and time) as well as contextual information on where the event took place. Remember to include only the factual information, what was observed and heard as well what was said and done. Figure 2 provides a sample anecdotal record for a playdough activity involving Jonas and his parents.

ABC analysis. An ABC analysis (antecedent, behavior, consequence) is a method of documenting behavior by looking at what happens before the behavior takes place, the targeted behavior itself, and what happens after the behavior occurs. Looking at these specific factors can help teachers gain insight into the possible function of a particular behavior. Antecedents can be thought of as triggers for a behavior, for example being given a demand. The behavior is what happens immediately following the antecedent and is typically an inappropriate response such as crying, defiance, tantrums, and/or falling down, to name a few. The consequence is what happens immediately following the
behavior, and at times teachers may be inadvertently maintaining a behavior based upon their response. As an example, Jonas throws himself on the ground when asked to wash his hands, and as a result he is told that he does not have to wash is a response that is actually encouraging the behavior because the non preferred task is removed. Ultimately, teachers want to identify how they can stop making the inappropriate behavior successful for the child. Figure 3 provides an example ABC analysis for Jonas.

Permanent products or portfolios. Permanent products can include photographs and audio tapes, or perhaps even samples of a child’s work. Teachers may choose to place these products into a portfolio as a way to organize and systematically collect information on children’s work to demonstrate their progress over time. The benefits of a permanent product or portfolio approach is to document individual change over time, rather than comparing children to each other, while also providing concrete information to share with parents and other stakeholders (Gullo, 2006). Figure 4 provides a sample product from Jonas.

A combination of these data collection techniques should be used to allow for a more comprehensive picture of Jonas’ behaviors and skills. Mrs. Walter now turns her attention to consideration of a specific type of authentic assessment, play-based assessment.

Play-Based Assessment

Play based assessment is one form of authentic assessment which has proven successful in obtaining information about the child’s strengths and areas of need which will directly lend to the development of intervention strategies and program development. Play-based assessment is a developmental process that involves observing how a child
plays alone, with other children, and with caregivers in free or structured play (Dykeman, 2008). Play-based assessment uses play as a medium through which social and cognitive delays can be identified (Farmer-Dougan & Kaszuba 1999; Garfinkle, 2004). This technique is an alternative assessment process, as compared to traditional standardized testing procedures (Dykeman, 2008), allowing for more authentic results when assessing young children.

The use of play-based assessment generally involves children who are three to six years old and typically occurs in the child’s natural environments such as classrooms, child care, and the home (Dykeman, 2008). Mrs. Walter knows that to get the best information, she will need to conduct the play-based assessment at home, where Jonas spends the majority of his time and is most comfortable. If Mrs. Walter and her team feel like they are not able to obtain all of the needed information from Jonas’ home based assessment, they may want to bring him into the preschool center Jonas’ family has decided upon. Fortunately, this preschool center houses the special education team and the actual classroom that Jonas will be attending. Mrs. Walter and her team will be able to set up mock situations in an attempt to elicit and observe specific behaviors that may not be seen at home, for example, interactions with peers during play, transitions between activities, and Jonas’ overall response to unfamiliar people and situations.

By observing children at play, trained observers can evaluate social skills, cognitive and language skills, motor skills, and emergent academic skills (Mindes, 2011). Conducting play-based assessment involves a transdisciplinary team of individuals from a variety of backgrounds including parents, speech language pathologist, licensed specialist in school psychology or an educational diagnostician, physical and/or
occupational therapists, special and general education teachers (Linder, 2008), and when needed behavior specialists. In our example, Mrs. Walter has also called in a consultant who specializes in young children with autism to assist her team throughout this process.

During the evaluation, team members observe and consult with each other all the while interacting with the child. To do this, the evaluation team must be flexible in changing roles and responsibilities as involvement in the assessment changes (Linder, 2008). In this type of model, the individuals involved share their expertise with other team members and collaborate to conduct assessments, determine appropriate goals, and implement intervention strategies (Bruder, 1994). This process promotes parent expertise of the child and is sensitive to the child’s needs and abilities due to the collaborative nature between the parents and the individuals involved in the assessment (Linder, 2006).

Based on the results of the play-based assessment, the team has determined that Jonas has average to above average skills in the areas of emergent academic and cognitive skills, as well as in motor skills. Jonas can communicate effectively when it is on his terms, but does struggle to make needs, wants, and feelings known when he is faced with unfamiliar situations and non-preferred activities, at which time he will shriek loudly or defy requests. He also has a difficult time relating to peers and adults in social situations, prefers to play alone, and is rigid in his unwillingness to share materials with peers, cooperate in play, and engage in sharing and turn-taking. Further, Jonas has difficult transitioning between activities, particularly from preferred to non-preferred tasks, for example hand washing. Jonas has strong skill sets in fine and gross motor, pre-academic, and cognitive areas which the team will consider when developing
interventions to target growth in the areas of effective communication in non-preferred activities, social skills, and transitions.

Assessment Results and Early Childhood Programming

As a consequence of the outcome driven education movement and state learning standards, early childhood programs have become more standardized in their instructional techniques and teaching practices. States must report the percentage of children who make progress and meet benchmarks to typical developmental standards (Bruder, 2010). Three categories are required to be addressed within the IEP: “(a) children have positive social-emotional skills (including social relationships); (b) children demonstrate acquisition and use of knowledge and skills (including early language/communication and early literacy); and (c) children use appropriate behavior to meet needs (Bruder, 2010, p. 346).” To help address these requirements, teachers can use the results from play-based assessments in planning and monitoring instruction of the children they teach (Trice, Wilmes, & Kohler-Evans, 2008).

When designing intervention practices, it is necessary for the teacher to understand that the results of the assessment is a reporting of the child’s cognitive and language abilities, social skills, emergent academic skills, and motor skills at that moment in time. Many young children may have a profile that depicts uneven development of abilities as this is not uncommon for young children, especially those with disabilities (Moore, 2009). Thus, it is critical that teachers develop interventions that are responsive to the child’s abilities as they develop in real time. Specifically, teachers must clearly acknowledge that assessment should be on-going. Children’s areas of needs
will change based on their developmental progress and interventions and programming will need to be redesigned to meet the current needs of the child.

Roper and Dunst (2003) emphasize that interventions must be implemented within the natural learning environment of the child. This is the environment that is unique to the individual child, parent, and family. Environments vary from one child, parent, and family to another. Further, the natural learning environments is not a setting, specific place, type of activity or a person, rather, it is a combination that makes for best practices. Jonas’ parents want him to attend a preschool program, and are also interested in learning about specific strategies they can implement at home and child care that will also help develop Jonas’ skills. Knowing best practices, Jonas parents have selected an inclusive preschool program that has strong collaboration efforts with the local school districts.

At the initial meeting with the IEP team, Mrs. Walter and the rest of the team members developed IEP objectives that will be put into place within the inclusive preschool setting that Jonas will be attending. The goals and objectives established were determined to be functional and meaningful across Jonas’ natural settings. Given that Jonas is diagnosed with autism, the early childhood team were sure to include evidence-based supports and modifications that that are specific to this type of disability, for example the use of visual supports, schedules, and social stories (Boyd & Shaw, 2010). An example of an IEP goal for Jonas may include: When given visual prompts for hand washing, Jonas will wash his hands using the following sequence of steps (go to sink, turn on water, pump one pump of soap from soap dispenser, place hands under stream of
water, rub hands together, turn off water, dry hands, return to work area) in 9 out of 10 trials.

Although the strategies listed above have proven effective for children with autism, it is important for educators to realize that “children who share the same label have a diversity of needs based on the degree of severity (from mild to profound) of their disability and the way in which their disability impacts learning a social interactions. Curriculum and instruction should be based on each child’s individual needs and skill development relative to how he functions in his environment” (Moore, 2009, pg. 20).

Conclusion

The provision of early intervention services for children like Jonas are necessary in order to prevent the occurrence of future school failure. The purpose of this article was to describe best practices in assessment of young children who are transitioning from ECI to public school services with specific emphasis placed on authentic assessment. Play-based assessment, a particular type of authentic assessment, uses play as a medium through which social and cognitive delays can be identified. The results from the assessment guides the development of individual programming that is unique to the child being evaluated. In the case of Jonas, the play-based assessment team developed an individual plan that will be implemented in an inclusive preschool environment. Authentic assessment provides the foundation for the establishment of meaningful instructional practices for young children. Once the plan is in place, the service providers are more readily equipped to provide children with disabilities, such as Jonas, evidence-based interventions that will increase the potential for school success and life outcomes.
Jonas has had a successful beginning to his preschool year. The assessment information provided to Jonas’ teacher, Mr. Hines, by Mrs. Walter and her team has proven invaluable as he plans activities in his classroom. Mr. Hines feels as though he had specific information about Jonas’ strengths and areas for improvement from the beginning. Therefore, Mr. Hines has been able to develop modifications for Jonas so that he can be successful throughout his day. Although Jonas still faces some challenges, Mr. Hines knows that he has the knowledge to continue to help Jonas across all areas of development.

Author Notes

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References


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Activity: Book reading

Participants involved: Mom, Dad, and Jonas

Date/Time: November 17, 2011/10:30 a.m.

Location: Jonas’ home

Mom and dad asked Jonas to join them on the living room floor to read a book. Jonas selected a favorite story and sat down with his parents. Jonas was attentive as parents read the book, asking questions and encouraging Jonas to respond. Jonas noted specific features of the book such as, “That truck has big wheels, there are 4 of them,” and “There is a J on this page, just like my name!”

Activity: Book reading

Participants involved: Mom, Dad, and Jonas

Date/Time: November 18, 2011/10:30 a.m.

Location: Jonas’ home

Mom and dad asked Jonas to join them for a book reading on the living room floor. This time, they selected a non-preferred book. Jonas immediately responded when he saw the book stating, “No! I don’t want to read that one!” Parents tried to entice Jonas with statements such as, “This book has great pictures,” and “There are even pop-up flaps you can look under.” Jonas was not interested and after a few moments of trying to persuade Jonas, parents relented and let him select a book.

Figure 1: Sample running record of a book reading activity
Activity: Playdough activity

Participants: Mom, Dad, and Jonas

Date: November 15, 2011

Length of observation: ~ 10 minutes

Mom and dad were asked to engage in a playdough activity with Jonas at their home. Jonas was hesitant at first to stop playing with his stuffed snake, a preferred toy, and move to the playdough. Mom says to Jonas, “If you can put your snake in the toy box, we can practice making snakes with our playdough.” Jonas screams and then responds, “No,” and continues to play with his snake. Dad goes over and helps Jonas to get his snake in the toy box. After several minutes of struggling and negotiating to get his snake back, Jonas eventually comes and sits down at the table with Mom and Dad. There is only one container of playdough and Jonas immediately grabs it, removes the lid, and squeezes the playdough out of the can. Dad says, “Jonas, can I have some of the playdough to make a snake,” to which Jonas replies, “No.” Dad again asks, “Jonas, can you please share your playdough with Mom and I?” Jonas quickly says, “No,” and takes the playdough to the end of the table to play by himself.

End of observation

Analysis: From the play interactions, it appears that Jonas would benefit from the following pragmatic skill based interventions:

- Turn taking
- Play transitions
- Compliance to requests
- Requesting materials

Caregivers can enhance Jonas’ interactive play behavior using:

- Initiating play with Jonas' preferred interest
- Imitating Jonas' play to create interest
- Providing a request
- Prompting a response
- Expanding positive feedback when Jonas follows the prompt

Figure 2: A sample anecdotal record for a playdough activity
Name: Jonas L.                                               Setting: Jonas’ home
Date: November 13, 2011                               Observer: Mrs. Walter
Targeted Behavior: Transition from preferred task to non-preferred task

<table>
<thead>
<tr>
<th>Antecedent</th>
<th>Behavior</th>
<th>Consequence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jonas is playing with his trucks and is asked</td>
<td>Jonas responds, “No!” and pushes mom away</td>
<td>Jonas is told he does not have to wash.</td>
</tr>
<tr>
<td>to put them away and</td>
<td>when she tries to help.</td>
<td></td>
</tr>
<tr>
<td>wash his hands for a snack.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Figure 3: Sample ABC (antecedent, behavior, consequence) analysis.*
This is my jet boat to Peter Piper Pizza. This boat has everything.