The Asset-Based Context Matrix: A Tool for Assessing Children’s Learning Opportunities and Participation in Natural Environments

This article provides a description of the Asset-Based Context Matrix (ABC Matrix). The ABC Matrix is an assessment tool for designing interventions for children in natural learning environments. The tool is based on research evidence indicating that children’s learning is enhanced in contextually meaningful learning environments. The ABC Matrix focuses on three types of learning contexts (family activity settings, community activity settings, and early childhood activities) and five characteristics of child behavior (interests, assets, functionality, opportunity, and participation). Information is gathered through conversations with parents, as well as through interactions with and observations of the child in natural environments. The ABC Matrix yields a rich array of information about a child’s everyday life that is useful for intervention planning. Sample questions, examples of information obtained, links to IFSP development, and a copy of the ABC Matrix are included.

In this article, the authors provide a description of a practice-based assessment tool, the Asset-Based Context Matrix (ABC Matrix), and illustrate its usefulness for assessment and intervention planning purposes. The ABC Matrix is a contextually based assessment tool that considers children’s everyday interests and abilities as factors promoting participation in natural environments. The tool assists practitioners and parents in gathering functional and meaningful information for developing contextually based outcomes and implementing interventions and activities in natural learning environments.

This article is divided into the following six sections:

1. the foundation of and rationale for contextually based assessments,
2. a description of the ABC Matrix’s operational framework,
3. the operational definitions of the assessment components,
4. a description of how to administer the ABC Matrix,
5. examples of ABC Matrix use, and
6. results from field-testing the ABC Matrix.

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Foundation and Rationale for Contextually Based Assessments

Since the reauthorization in 1997 of the Individuals with Disabilities Education Act (IDEA), U.S. states have been required to provide early interventions in natural learning environments for children ages birth to 3 years with disabilities or developmental delays (Walsh, Rous, & Lutzer, 2000). Policymakers and practitioners have struggled with this natural environment provision, however, because traditional service delivery models and approaches to early intervention and therapy do not fit well with the requirements (Hanft & Pilkington, 2000; Rainforth & Roberts, 1996; Wilcox & Shannon, 1996). Traditional early intervention practices focus on teaching children discrete behaviors and skills in isolated settings (Hanft & Pilkington, 2000). In their efforts to use natural environments as contexts for children’s learning, early intervention practitioners have focused on the where, but not the how, of service provision (Dunst, 2000; Hanft & Pilkington, 2000; Selden & Rush, 2001). Natural environment enthusiasts make the case that early childhood intervention and therapy should be made meaning-
ful and functional by being implemented not only in more natural environments, but also in the context of activities that are part of the everyday routines and experiences of children and families (Hanft & Pilkington, 2000; Harris & McEwen, 1996; Kellegrew, 1998; Stremel et al., 1992; Wolery, 1996).

The difficulty that practitioners face in developing and implementing interventions in natural settings is perhaps best demonstrated by child and family outcomes on Individual Family Service Plans (IFSPs) and Individualized Education Programs (IEPs; Campbell & Halbert, 2002; Dunst, Bruder, Trivette, Raab, & McLean, 1998; McWilliam, Ferguson, Harbin, Porter, & Vaderviere, 1998). Dunst et al. (1998) examined the content of IFSPs and IEPs from early intervention and preschool programs in eight states. They evaluated the extent to which more than 3,000 IFSP outcome statements and IEP objectives were described in the context of natural environments. They found that only 1.3% of outcomes and objectives examined were described in terms of everyday family activities, and only 0.4% of these statements were described with reference to everyday community activities. In addition, 57% of the outcomes on IFSPs the researchers examined were deemed to have little or no likelihood of promoting a child’s participation in family or community activities.

One reason practitioners find implementing interventions in natural environments challenging is the absence of assessment tools specifically designed to obtain information about the development-enhancing characteristics of everyday learning opportunities (Bronfenbrenner, 1992; Dunst, Hamby, Trivette, Raab, & Bruder, 2002). Assessment tools and associated strategies for blending intervention practices with the development-enhancing characteristics and features of natural environments are needed (Dunst, Trivette, Humphries, Raab, & Roper, 2001).

A number of currently available assessment methods and procedures examine children’s participation in everyday settings and activities. (e.g., Bricker, 1996, 2002; Linder, 1990; Meisels, 1996). The ABC Matrix builds upon these approaches by addressing the need for contextually based assessment tools that assist practitioners in bridging the gap between assessment findings and the development and implementation of interventions in natural environments.

The ABC Matrix

Description

The ABC Matrix is based on the premise that “natural environments are not places, but the everyday routines, experiences, and activities occurring in different social and nonsocial contexts as part of family and community life” (Raab & Dunst, in press, p. 3). Figure 1 contains the operational framework that guided the development of the ABC Matrix. This framework is based on assessment outcomes influenced by children’s opportunities to express interests and assets, children’s use of functional and meaningful interactions, and children’s participation in everyday activities. As depicted in the framework model, each of these characteristics is expressed within the contexts and activity settings of the child’s family life, community life, and early childhood settings.

The assessment model builds on a particular approach to intervention practices. This approach emphasizes the importance of having children learn in natural environments and having them participate in numerous activities in a variety of contexts as part of everyday life (Dunst, 2001; Dunst, Bruder, Trivette, Hamby, et al., 2001; Dunst & Humphries, 2003). Based on an extensive review and synthesis of the early childhood literature, Dunst, Hamby, Trivette, Raab, and Bruder (2000) came to the following conclusions:

1. Children are more likely to engage in activities in which they are interested and in which they use and build on existing assets.
2. Learning is enhanced when children engage in meaningful activities in their natural environments.
3. Participation in activities increases when children have ample opportunities to engage in interactions that support and strengthen their abilities in naturally occurring ways in everyday life opportunities.
4. Children are more likely to develop and perfect their interactive competencies with people and objects when they have numerous opportunities to engage in interactions that support and strengthen existing and emerging abilities in naturally occurring ways in everyday life.

Operational Definitions of the ABC Matrix Components

The ABC Matrix focuses on the strengths and abilities of children and on naturally occurring opportunities as part of participating in everyday activity settings. In this section, we provide operational definitions for each assessment component of the Matrix.

Context. The ABC Matrix assesses a child’s everyday participation in three contexts: family life, community life, and early childhood program participation (when appropriate). The term family life includes the day-to-day events in which a child and family participate. Family life includes, but is not limited to, a child’s participation in routines and household jobs, holidays and special events,
indoor and outdoor play, and family traditions and rituals. The term *community life* encompasses activities and interactions the child and family have in the community, such as park outings, recreation center activities, and organized religious events. The term *early childhood programs* covers activities in childcare settings, mother’s day out programs, Head Start, playgroups, or family resource centers.

**Activity Settings.** Activity settings are these activities in which a child spends time engaging in various behaviors. They are naturally occurring routines and daily events, such as getting ready for bed, eating meals, riding in the car, being read a story, taking a walk, playing outside on swings, and playing dress up. Each activity setting provides opportunities for the child to learn and to express his or her interests and assets (Dunst & Bruder, 1999; Dunst & Hamby, 1999a, 1999b; Gallimore & Goldenberg, 1993). Activity settings offer opportunities in which children can participate and build upon their competencies in various locations, with different materials, and with a variety of people in diverse ways.

**Interests and Assets.** The term *interests* refers to a child’s likes, preferences, and favorites that encourage engagement and participation in different settings, expression of existing competence, and enhancement of new abilities (Dunst, Herter, & Shields, 2000; Kellegrew, 1998). Interests include how the child spends time and what activities or events maintain his or her attention. A fundamental principle of contextually based learning is that a child’s interests play an important role in influencing competence in expression and development (Gelman, Massey, & McManus, 1991; Guberman, 1999; Nelson, 1999). Learning opportunities that are interest-based and that provide contexts for asset expression optimize learning and development (Dunst, Bruder, Trivette, Hamby, et al., 2001; Dunst, Hamby, et al., 2000; Gallimore & Goldenberg, 1993; Gelman et al., 1991; Guberman, 1999; Nelson, 1999; Riksen-Walraven, 1978; Shelden & Rush, 2001).

**Assets** are the particular abilities that are a child’s strengths, talents, and capabilities. A child is most likely to use his or her assets as the means for participating in everyday activity settings (Hanft & Pilkington, 2000). Children’s assets include, but are not limited to, smiling, vocal-
izing, reaching, crawling, and jumping. As children use their abilities to participate in activities, they are able to strengthen them and gain the confidence to learn new skills.

**Functional and Meaningful Interactions.** The phrase *functional and meaningful interactions* refers to critical and useful behaviors that enable a child to produce a range of social-adaptive competencies, which in turn promote and increase participation in everyday activity in an independent, competent, and satisfying manner (Bricker, Pretti-Frontczak, & McComas, 1998; Wolery, 1989). The term *functional* is used in a very specific sense to mean the relationship between child behavior and its socioenvironmental consequences (e.g., increased participation and mutually beneficial interactions). Examples of children’s functional and meaningful interactions include using words to communicate the desire to go outside to play, using a cup to drink at mealtime, and rolling across the floor to obtain a favorite toy.

**Opportunity and Participation.** The term *opportunity* refers to the number of chances (quantity) and the quality of those experiences occurring in activity settings that promote increased social and nonsocial child participation in cultural activity (Kellegrew, 1998). *Quantity* refers to the frequency, intensity, and variety of everyday experiences that provide contexts for strengthening and promoting child competence (Bronfenbrenner, 1995). *Quality* refers to the social and nonsocial characteristics of people and objects that engage a child in an activity that promotes participation and competence production (Dunst, Bruder, Trivette, Raab, & McLean, 2001; Hanft & Pilkington, 2000).

The term *participation* refers to the ways in which a child takes part in everyday activities (Dunst, 2001). Participation in an activity helps a child strengthen existing abilities and also learn new skills. As an example, we can use a child who shows an interest in feeding himself, can hold a spoon, and is given the opportunity to eat with a spoon multiple times each day. The ways in which the child actually shows his interest in mealtime, uses the spoon to feed himself, and interacts with others during mealtime defines the child’s participation. He may show interest by smiling or moving his whole body, he may be able to bring the spoon to his mouth once a spoonful of food is scooped for him, and he might smile and coo at his parents during meals. Having the opportunity to participate in this way helps him to perfect this skill, gives him chances to elaborate on his abilities, and provides opportunities to learn new ways to participate in mealtime.

**Possibilities.** The term *possibilities* refer to the ways in which a child and family can expand the child’s opportunities to learn and participate in everyday experiences (Dunst, 2001; Dunst, Bruder, Trivette, Raab, et al., 2001; Kellegrew, 1998). Imagine that the child was interested in feeding himself and currently participated in meals by reaching for the spoon. A possibility for this child might be to give him an opportunity to participate in meals by offering a spoon for him to hold. He may start to participate in meals by dipping the spoon into his food as well as bringing it to his mouth. Giving him an opportunity to hold and dip the spoon in food builds on his ability to use a spoon for participating in a more conventional way in mealtime than before.

**Administration**

The Appendix includes a copy of the ABC Matrix. The front page of the Matrix is used to record child identification information, the assessment settings, and other background information (respondent and administrator names and the purpose of the assessment). The second page includes instructions and definitions of the assessment components. The third and fourth pages provide an organizational format for recording assessment information. The contexts of learning (i.e., family life, community life, early childhood programs) are listed across the top of the recording form, and the targets of assessment (i.e., activity settings, interests and assets, functional and meaningful interactions, opportunities, participation, and possibilities) are listed down the left column. The last page includes guiding questions for practitioners to use when gathering information for each assessment context.

Practitioners using the Matrix collect information for each of the previously described Matrix components through observations, interviews, and conversations with parents or other primary caregivers. Additional information is gathered through interactions with and observations of the child. Practitioners organize assessment information by recording the information on the Matrix according to the target assessment components.

**Examples of Matrix Use**

Two brief examples are provided here to illustrate how the ABC Matrix facilitates intervention-based assessment and planning. The first example is a 4-month-old child with Down syndrome, and the second example is a 2-year-old child recently diagnosed with autism.

**Jimmy**

Jimmy’s family began receiving early intervention services when Jimmy was 2 months old. His parents stated that their priorities were ensuring his health and promoting his development. The family did not want extensive evaluations, but family members agreed to participate in a...
developmental screening using the Developmental Observation Checklist System (DOCS; Hresko, Miguel, Sherbenou, & Burton, 1994) and an assessment using the ABC Matrix.

An occupational therapist administered the DOCS when Jimmy was 3 months old and found that he was functioning within normal limits for his age. Although the DOCS indicated specific developmental skills Jimmy either had or had not attained, it shed little light on Jimmy’s specific activity settings, interests, or other helpful information for developing and implementing functional and asset-based IFSP outcomes.

In contrast, the ABC Matrix, which the same therapist implemented 2 weeks later, yielded highly usable information based on Jimmy’s assets and interests and the family’s specific interests, assets, and activity settings. Specifically, the Matrix showed that Jimmy and his family routinely participated in over a dozen activity settings and that Jimmy particularly enjoyed swinging, bath time, being held and cuddled, riding in the car, and being talked to or read to, among other interests. The Matrix showed that Jimmy was visually alert, cooed frequently, and was attentive to his surroundings and that family members interacted with him often. The assessment found that Jimmy sought other individuals’ attention by crying and by kicking his feet in excitement, smiled in response to other persons’ smiles, and obtained and maintained eye contact with them.

The Matrix also identified specific opportunities throughout the day in the home, in the community, and in Jimmy’s childcare setting where Jimmy could participate in activities that he enjoyed and was able to do. In addition, the Matrix showed ways in which Jimmy was already actively participating in his environment, as well as possible ways that he could participate in everyday experiences and learning opportunities. These included, for example, giving him the opportunity to reach for objects and people within the context of his interactions, giving him more time on his stomach because he enjoyed this and was very active during “tummy time,” increasing his opportunities for using vocalizations to elicit attention, increasing his opportunities for swinging because he also enjoyed and was very active during this activity, and giving him time to respond vocally when talking to him. These possibilities led directly to several specific contextually based IFSP outcomes, including the following items:

- “Jimmy’s parent will give him many opportunities to reach for and vocalize to people and objects during play and interactions with others.”
- “Jimmy’s parents will give him the opportunity to be on his tummy during different times in the day to play, vocalize, and get others attention.”

The second example is of a 24-month-old girl, “Stephanie,” who was recently diagnosed with autism as part of a developmental evaluation and was referred to an early intervention program. Stephanie’s parents initially sought the evaluation because of their concern that she might be behind in her language abilities. She also was displaying what they described as “severe temper tantrums.” In addition to making the diagnosis of autism, the evaluation indicated that Stephanie’s overall functional age was at an 18-month level. Staff members at the center conducting the evaluation noted, “The only thing Stephanie really enjoys is coloring.” Staff members also felt that she “tended to obsess on it,” and recommended that she be encouraged to stop engaging in this activity.

About a month after Stephanie’s initial evaluation, an early childhood teacher completed the ABC Matrix with the family. Like the traditional evaluation, the Matrix results indicated that Stephanie had a strong interest in coloring, but it also revealed that her parents believed that Stephanie had an exceptional talent in this area. They did not want to stop her from coloring, although they were concerned about her obsessive behavior. The Matrix also indicated many other strengths and interests that were not identified as part of the more traditional evaluation. These included listening to and repeating limericks, rhymes, and music; playing with her brother; watching game shows on TV; printing words to label pictures that she had drawn; playing with toy cars and trucks; playing with her dog; snuggling with her mom on the couch; playing outside; rolling a ball with her dad; and helping to stir food in the kitchen.

Based on conversations with the early childhood teacher and on a review of the results from the ABC Matrix, family members became more aware of the range of Stephanie’s interests and assets and of the ways in which Stephanie was using coloring to communicate and learn. For example, they realized that many of the pictures Stephanie colored depicted activities she had experienced earlier in the day and that she often used these pictures to communicate with family members. She also labeled many of the items in the pictures, which gave her practice at printing letters and sounding out words. The family realized that this was an advanced skill for a child of Stephanie’s age. They also realized that although coloring was Stephanie’s preferred activity, she had interests and abilities in many other areas. They decided to continue to encourage her coloring time. They also decided
that they would encourage and promote her participation in the other activities she enjoyed. As a result, coloring time lessened because of her engagement in other activities. They also decided to encourage her to communicate with other family members by using her drawings as a communication tool. They expressed relief that they were able to develop a positive approach to support Stephanie’s learning and participation.

**Implications**

These examples illustrate several points about the usefulness of the ABC Matrix. First, in both cases, the Matrix yielded information that was not readily obtained from more traditional assessments. Whereas the information obtained from the traditional assessments provided information about the developmental ages and diagnoses of the children, the information gathered using the Matrix informed the family and early childhood practitioners about the children’s interactions and participation in daily experiences. Second, the examples indicate that the ABC Matrix was useful for identifying children’s interests and assets in a way that made it possible to construct contextual and asset-based IFSP outcomes and interventions. Third, the examples demonstrate that the parents’ input was vital in identifying the specific details concerning their children’s interactions with people and objects that led to meaningful IFSP outcomes. Fourth, the examples illustrate the successful use of the ABC Matrix by two different practitioners from different professional disciplines, one of whom had 12 years of experience and one of whom had just 3 years of professional experience.

**FIELD TESTING**

We field-tested the ABC Matrix with nine families over a 6-month period. These families and their children were participating in an early childhood intervention program. To ensure that the ABC Matrix would have broad applicability for the field of early childhood intervention, the field testing was conducted by practitioners from seven different disciplines (nursing, early childhood education, occupational therapy, physical therapy, psychology, social work, and speech and language therapy) who had experience in early childhood intervention that ranged from 1 year to 23 years. Furthermore, these practitioners used the ABC Matrix with children of different ages, abilities, and characteristics. Table 1 lists some of the characteristics of the participating children. During the field testing, five practitioners implemented the ABC Matrix with one family each, and two practitioners each implemented it with two families.

The practitioners all had at least 3 years’ experience in implementing traditional assessment procedures, and they were familiar with the concept of providing interventions in natural environments. The ABC Matrix is relatively straightforward for experienced practitioners to use. They had several occasions to meet, ask questions, and discuss their experiences with us. Based on the discussions and practitioner feedback, we made several modifications to the Matrix, including providing more space for recording information, adding guiding questions, and including a section for recording activity settings.

**Questions Regarding the Matrix**

The field testing was designed to answer several questions about the ABC Matrix. Specifically, we were interested in the extent to which the ABC Matrix was:

- helpful as an assessment tool for eliciting meaningful, functional information about a child’s development and participation within the contexts of everyday experiences;
- completed easily by practitioners and the parents together;
- helpful to the assessment process with respect to the actual layout and design;
- consistent with an asset-based approach to early childhood intervention;
- helpful as a tool for identifying and developing contextually based interventions and outcomes; and

<table>
<thead>
<tr>
<th>Child</th>
<th>Child’s age (mos.)</th>
<th>Diagnosis</th>
<th>Involvement in early intervention (mos.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>K. J.</td>
<td>4</td>
<td>Prematurity</td>
<td>2</td>
</tr>
<tr>
<td>C. W.</td>
<td>6</td>
<td>Turner’s syndrome</td>
<td>6</td>
</tr>
<tr>
<td>H. L.</td>
<td>7</td>
<td>Pearson’s syndrome; Demyelination disorder</td>
<td>3</td>
</tr>
<tr>
<td>B. D.</td>
<td>9</td>
<td>Prematurity</td>
<td>8</td>
</tr>
<tr>
<td>K. K.</td>
<td>11</td>
<td>Bartter’s syndrome</td>
<td>1</td>
</tr>
<tr>
<td>J. D.</td>
<td>18</td>
<td>Arthrogryposis</td>
<td>15</td>
</tr>
<tr>
<td>M. T.</td>
<td>24</td>
<td>Autism</td>
<td>2</td>
</tr>
<tr>
<td>B. U.</td>
<td>27</td>
<td>Down syndrome; Infantile spasms</td>
<td>18</td>
</tr>
<tr>
<td>F. D.</td>
<td>27</td>
<td>Prematurity</td>
<td>23</td>
</tr>
</tbody>
</table>

*At the time the ABC (Asset-Based Context) Matrix was administered.*
• useful in gathering information that was not readily obtained through other assessment instruments.

**Practitioner Experiences Using the Matrix**

Results of the field test indicated that all of the practitioners found that the ABC Matrix was easy to administer, had a user-friendly layout and design, and provided useful information for IFSP development. The practitioners indicated that the guiding questions were helpful in determining the types of questions to ask in each section. Several of the practitioners expressed surprise at how much information could be gathered in a relatively short time.

The practitioners also indicated that the information the ABC Matrix provided went beyond that obtained from traditional assessments and observations. Even though the field-test participants were experienced early interventionists working in an asset-based program (Dunst & Raab, 2004), they all reported that use of the ABC Matrix resulted in more detailed information about children’s assets and interests than they previously had been able to identify. One practitioner stated, “I always included strengths in my assessment reports before, but it seemed like something extra that I was digging for just to put in the report. With the Matrix, the strengths really come alive and are an integral part of the process, not something extra that is just thrown in.”

Another practitioner noted that the ABC Matrix “really helped me focus on the whole reason we’re working with kids—to help them learn to do things and to fully participate in their family and community—not just to identify what they can’t do.” Several other practitioners commented that using the Matrix simply helped them remember to talk with a family about everyday routines, activities, and environments in which they participate. The following is a typical comment: “I just wouldn’t have remembered to ask about all those different routines, especially ones such as grocery shopping, unless I was using something like the Matrix.”

The practitioners also reported that IFSP outcomes were easier for families to identify and develop based on use of the ABC Matrix. Because of the level of detail and the focus on functional information, the information generated by the Matrix lends itself naturally to IFSP development. In addition, because the Matrix takes into consideration family-level activities and interests, the resulting IFSP outcomes tend to match families’ interests and priorities very closely. Examples of IFSP outcomes developed while using the ABC Matrix are included in Table 2.

**TABLE 2. Examples of Contextually Based IFSP Outcomes Using the ABC Matrix Assessment**

<table>
<thead>
<tr>
<th>Example No.</th>
<th>Outcome</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>David’s parents will provide him additional opportunities to participate at mealtime by giving him a spoon to hold and dip into his food.</td>
</tr>
<tr>
<td>2.</td>
<td>Suzie will be provided the opportunity to be involved in play at the sand and water tables and in the sandbox. She will also help her parents with dishes at the sink, where she will have the opportunity to scoop, dump, grab, feel the water and sand, splash, and pour and share materials with others as a part of her participation.</td>
</tr>
<tr>
<td>3.</td>
<td>Jimmy’s parents will give him the opportunity to take part in play activity settings, such as tickling, bicycle leg game, and playing with his jungle gym and other toys, to encourage his cooing, smiling, listening, and attentiveness to people and toys.</td>
</tr>
<tr>
<td>4.</td>
<td>Sarah’s parents will use a responsive interactive style to encourage Sarah to participate in daily activities and routines.</td>
</tr>
<tr>
<td>5.</td>
<td>Gary will have the opportunity to dig, fill buckets, and pick up sticks as part of his day on his grandparents’ farm.</td>
</tr>
<tr>
<td>6.</td>
<td>Gerie will participate on the playground at school; her cousin’s home; and at the neighborhood park by sliding, swinging, running, and climbing.</td>
</tr>
</tbody>
</table>

**Note.** IFSP = Individualized Family Service Plan; ABC = Asset-Based Context.

**Conclusion**

To date, both the qualitative and quantitative findings from using the ABC Matrix indicate that (a) the types of information obtained differs from information typically gathered via traditional approaches to assessment, and (b) this information directly informs the ways in which natural learning environment interventions may be planned and implemented.

Our work in developing and using the ABC Matrix has three major implications for practice. First, the ABC Matrix is an innovative assessment process that results in useful and functional assessment information based on children’s participation in the contexts of family life, community life, and early childhood programs. The Matrix is easily usable by practitioners and parents as an assessment process focusing specifically on contextually based learning opportunities.
Second, the ABC Matrix provides a systematic, efficient way for practitioners and parents to gather a great deal of asset-based, and functional information that is also consistent with the family’s values, interests, and priorities. Although the information generated is specific to each child and family, its organization and categorization is based on conceptually sound principles and practices of early childhood development (Bricker et al., 1998; Bronfenbrenner, 1995; Dunst, 2001; Dunst & Bruder, 1999; Dunst, Trivette, et al., 2001; Dunst, Herter, & Shields, 2000; Hanft & Pilkington, 2000; Kellegrew, 1998; Wolery, 1989). Because of the specificity, functionality, and conceptual relevance of the information, the ABC Matrix is particularly helpful in generating intervention outcomes and strategies that may be implemented in children’s natural learning environments.

Third, the ABC Matrix is a useful tool for systematically collecting and organizing information about change in child development and child participation over time. Information on the Matrix can be updated as needed and as a child’s activity settings, interests, assets, use of behaviors, opportunities, and participation change in the context of everyday life experiences.

The next step in the development and validation of the ABC Matrix is to further investigate the extent to which practitioners use the ABC Matrix to develop asset-based, functional, contextual IFSP or IEP outcomes. So far, case study research has indicated that practitioners’ use of the ABC Matrix results in a rich array of information about the child’s functioning in his or her everyday life. The use of the ABC Matrix is to further investigate the extent to which practitioners use this developmental approach to early intervention.

AUTHORS’ NOTE

The assessment procedure described in this article was supported by ongoing research and practice at the Family, Infant and Preschool Program, J. Iverson Riddle Developmental Center, Morganton, North Carolina. The authors acknowledge the support of Carl J. Dunst and the contributions of the staff of the Family, Infant and Preschool Program and the children and families who assisted in the development and field-testing of the Asset-Based Context Matrix.

REFERENCES


APPENDIX: ASSET-BASED CONTEXT (ABC) MATRIX

Linda L. Wilson and Donald W. Mott

Instructions

The Asset-Based Context (ABC) Matrix is a functional assessment tool for parents and practitioners in early childhood and family support programs to identify existing and potential contextually meaningful and relevant learning opportunities and activities for children. The ABC Matrix should be completed by one or more of the child’s parents or other primary caregivers, with the participation of an early childhood practitioner when desired. Below are the definitions of the assessment areas captured by the Asset-Based Context Matrix.

Activity Settings are everyday experiences, opportunities, or events that involve a child’s interactions with people and objects providing him or her a basis for learning about one’s own abilities (Dunst, 2001). Activity settings are those everyday activities that happen in the different places where children and families spend their time.

Interests are the child and family’s likes or preferences. They are favorite toys, objects, people, or events that encourage engagement and participation in different activity settings. Interests encourage both expression of existing abilities and promotion of new learning.

Assets are the abilities, strengths, skills, and capabilities used to participate in interactions with objects and people and which produce desired social and nonsocial environmental consequences and effects as part of and because of this participation.

Functional and Meaningful Activities are interactions between children and their social surroundings in which children use a behavior purposefully to communicate, move, and interact with objects and people. They also are those critical activities that are performed for the child or necessitate the participation of another person (e.g., bathing, dressing, eating).

Opportunity is the quantity and quality of experiences occurring in activity settings promoting increased social and nonsocial child participation in everyday activity (Kellebrew, 1998). Opportunity is the number of chances and the quality of those chances that children have in everyday activity. Opportunities set the occasion and promote participation in everyday activities.

Participation refers to the ways in which a child takes part in everyday activities. Participation is promoted when caregivers pay explicit attention to opportunities promoting child behavior that is conventional and both socially and culturally acceptable. That is, child participation is increased in ways that provide opportunities to learn, practice, and perfect abilities that permit a child to “fit” into his or her social and cultural groups and settings (Dunst, 2001).

Possibilities are new opportunities and ways of participating in everyday experiences. Possibilities build on the child and family’s existing interests and assets, current opportunities, and participation, resulting in new ways of interacting with objects and people, as well as increased frequency, intensity, and variety of opportunities (Kellebrew, 1998).

Note. All components of this Appendix are from The Asset-Based Context Matrix, by L. L. Wilson and D. W. Mott, 2003, Morganton, NC: Family, Infant & Preschool Program. Copyright ©2003 by Family, Infant and Preschool Program. This appendix may be reproduced with the permission of the Family, Infant and Preschool Program, J. Iverson Riddle Developmental Center, 300 Enola Road, Morganton, NC 28655. Reprinted with permission.
Sample ABC Matrix® Questions

Activity Settings
- What does your child and family do every day or almost every day?
- What are those things that have to be done, such as meals, dressing, bathing?
- What does your child and family do on certain days, weekends, or times of the week/year?
- What are the special events in which your child and family participate?
- What are the special activities or events as part of your child and family’s life?

Child and Family Interests
- What does your child and family choose to spend time doing?
- What are your child’s favorite toys, people, and events?
- What are those things that are interesting or enjoyable to your child and family?

Child and Family Assets
- What does your child and family work especially hard at doing?
- What are your child and family especially good at doing?
- What are your child and family’s strengths, skills, and accomplishments?

Functional and Meaningful Interactions
- What does your child do to get started in play?
- What does your child do to keep play or an interaction with you or others going?
- How does your child get what he or she wants?
- How does your child get to where he or she wants to go?

Opportunities
- What activity does your child get to do every day?
- How often does your child get to do his or her favorite things?
- Where are the places your child gets to do the things he or she likes and can do?
- Who does your child get to play or interact with on a regular basis?

(Appendix continues)
(Appendix continued)

**Participation**

- What does your child actually do during an activity that he or she likes to do and is good at doing?
- What are the specific ways in which your child participates in interactions with objects and people?

**Possibilities**

- What are the ways that the current opportunities and participation can be expanded?
- What interactions and skills would you like your child to develop?

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<tr>
<th>Components</th>
<th>Learning Contexts</th>
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<td>Family Life</td>
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<td><strong>Activity Settings</strong></td>
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<tr>
<td>(Everyday experiences, opportunities, or events)</td>
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<tr>
<td><strong>Child and Family Interests</strong></td>
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<tr>
<td>(Child and family’s likes, preferences, and favorites)</td>
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<tr>
<td><strong>Child and Family Assets</strong></td>
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<tr>
<td>(Abilities, strengths, skills, accomplishments, and capabilities)</td>
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<td>(Purposeful interactions; ways interests and assets are used in everyday life)</td>
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<td><strong>Current Participation</strong></td>
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<td>(Ways in which a child takes part in everyday activity)</td>
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<td><strong>Possibilities</strong></td>
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<tr>
<td>(New learning opportunities, ways of participating in everyday experiences, and increased opportunity)</td>
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