FEATURE | *by Zlata Stankovi-Ramirez and Josh Thompson*

Rethinking developmental domains to improve classroom observations

"How did you teach Clarissa her colors?" asks Ms. Laura, the pre-K aide.

"I didn't," says Mr. Dan, the toddler teacher. "I just started observing her more carefully."

"Tell me about that," says Ms. Laura.

"Well, one day I noticed how excited Clarissa became while matching color swatches from the sensory shelf," says Mr. Dan. "Then I watched her play with finger paints. She seemed to love comparing them.

"Later, she began matching colors in books—especially *A Color of His Own* about the chameleon. She even carried that book from the library corner across the room over to the sensory shelf to match identical colors.

"No, I didn't 'teach' her the colors," says Mr. Dan. "I just watched her and noticed what she liked. Her interest in colors gave me clues about where I could direct her attention."

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Teachers can learn so much from observing children. Effective teachers use various methods to observe and know the whole child, as listed in Table 1.

Narrative-type strategies include 1) writing anecdotal records, like the incident above, 2) using running records, recording on paper everything going on in real time, and 3) reflecting about a child's experience and writing about it (as in a diary) outside the classroom, after the moment has passed.

Purposes for observation
- To know an individual child
- To assess growth
- To evaluate a program

Observation strategies
- Narrative-types
  - Anecdotal records
  - Running records
  - Diary method
- Checklists
- Sampling
  - Portfolios
  - Time-sampling
  - Event-sampling

Table 1: Purposes and strategies for observation (Head Start, 1999)

Similarly, checklists can serve a useful function in recognizing key behaviors or sequencing observation information.

Sampling strategies include observation during a specific time interval (behaviors during a 20-minute period, for example) or by a specific event or behavior. Sometimes teachers may gather various samples of a child's work in a portfolio—pieces of artwork,

photos of block structures, sound recordings of a child talking, and videos of music or physical activities, for example.

Each strategy is used to fulfill curricular objectives, to learn what a child knows, and what a teacher needs to teach.

Knowing the whole child

But another purpose of observation is to know the child, the whole child (ASCD, 2015; Copple & Bredekamp, 2009; Kostelnik, Soderman, Whiren, & Rupiper, 2015; Weisman & Hendrick, 2013). The whole child approach, according to the Association for Supervision and Curriculum Development, "is an effort to transition from a focus on narrowly defined academic achievement to one that promotes the long-term development and success of all children."

One key tool in knowing the whole child is to focus on domains of development when conducting observations, in order to construct a well-rounded view of an individual child.

The classic approach to development recognizes four domains: physical, intellectual, emotional, and social. This approach has been summarized in the mnemonic P.I.E.S. These four basic domains help the observant teacher focus on various aspects of behavior and create a detailed observation report.

Recent innovations in the study of child development have prompted many teachers to expand their perspective of developmental domains, looking for more robust descriptions of children and their

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growth. For example, the Head Start Framework (Flores, Curby, Coleman, & Melo, 2016) uses five domains in its approach to the whole child (Table 2).

The domains covered by the Head Start Framework are

- language and literacy development,
- cognition and general knowledge,
- approaches toward learning,
- physical well-being and motor development, and
- social and emotional development.

Table 2: Head Start Framework (Flores, Curby, Coleman, & Melo, 2016, p. 4)

One set of authors—Marjorie J. Kostelnik, Anne K. Soderman, Alice Phipps Whiren, and Michelle Rupiper—has come up with six domains of development. In their text, *Developmentally Appropriate Curriculum: Best Practices in Early Childhood Education (6th Ed.)* (2015), they use the following domains: aesthetic, affective (emotional), cognitive, language, physical, and social.

These authors make a point of listing them alphabetically, A through S, to de-emphasize any one domain over any other. All six represent important information about the young child.

PLACES covers six domains

For the purpose of helping busy teachers remember all six domains while in the midst of quick observation protocols, we invite early childhood professionals to use the mnemonic PLACES to observe six developmental domains: Physical, Language, Aesthetic, Cognitive, Emotional, and Social.

As robust as it is, the PLACES tool is compact enough to travel light and remain with an observer throughout a busy day of watching children grow.

Physical

The physical domain can be divided into two components: 1) motor development, and 2) health, safety, and nutrition. Motor development refers to children's ability to control their hands, feet, and movement through play, as well as their large and fine motor skills. The health, safety, and nutrition component refers to the lifestyle choices children cultivate in school and at home that lead to healthy and productive lives (Kostelnik et al., 2015).

Children learn the fundamental motor skills of

PLACES: 6 Domains of Early Learning And Development

Domain	Description	Example
P **Physical**	Physical development can be divided into two components: 1) Motor Development, and 2) Health, Safety & Nutrition. High-quality learning environments provide opportunities for children to develop fundamental motor skills and to engage in healthy lifestyles.	Dasol sought any way possible to make learning physical. Once outside, this active, impetuous learner could be still for an extended period when it fulfilled his play narrative. Knowing this, the observant teacher crafted meaningful, physical engagments in and out of the classroom.
L **Language**	Human language is a built-in genetic predisposition to connect, hard-wired into the brain. We are wired to connect. Language provides multiple important functions for children. The development and association of print with meaning begins early in a child's life.	Eighteen-month-old Jake was playing at home when frightened by a loud noise. Comforted by reading, he grabbed a favorite book and turned the page until he found a picture of a scared sheep. Unable to describe his experience, he understood there was a book where his feeling was written down.
A **Aesthetic**	The aesthetic domain refers to children's appreciation of natural beauty, and their experience in the arts (art, music, dance, drama). They make judgments and preferences based on all the exposure and discovery provided to every child in the classroom.	A teacher took her children on a nature walk when the leaves were turning yellow, red and brown. One child suggested collecting leaves. The teacher used classroom resources as storage options to collect leaves. Once back in the classroom, the children found different ways to use their new treasures.
C **Cognitive**	Asking children open-ended questions about topics that interest them fuels their enthusiasm for learning. As children develop their cognitive abilities, they will be able to solve complex problems. Effective teachers strive to teach children, not curriculum.	A child asked his teacher "Where do trees come from?" This question grew within the class as they developed an abundance of activities, lessons, and circle time conversations for the entire class. Studying science was rooted in the real world the children were experiencing.
E **Emotional**	Understanding one's own emotions and developing compassion for other's feelings are valuable skills. The best place to see children's emotional capacity is to observe them at play. Helping children identify difficult behavior develops resilience and helps them become effective problem solvers.	The classroom parakeet funeral was over the top for most of the kindergartners. But for one set of girls, this was just the right way to relate to one another, and this emotional expression and interaction used rituals to express collective loss.
S **Social**	The development of personal relationships and appreciating the similarities and differences among people are typical social skills a child must acquire. Social skills are best learned during situations that arise in the classroom organically.	Two-year-old Gabriella encountered difficulties joining children during open-ended play. As the school year progressed, Gabriella learned how to ask her friends to join them. At the end of the school year, the teacher observed and documented that Gabriella was showing emergent leadership skills.

Adapted from Kostelnik, M., Soderman, A., & Whiren, A. (2015). Developmentally Appropriate Curriculum: Best Practices in Early Childhood Education (6th ed.). London, UK: Pearson. Table designed by Frank Ramirez (2017).

climbing, running, and striking (batting a baseball, kicking a soccer ball, for example) through play by observation, instruction, and practice. Effective teachers provide opportunities for children to practice walking, skipping, climbing, and running. Likewise, teachers provide opportunities for children to engage in understanding healthy food options, and how to take care of their teeth and bodies. These skills are ones children are typically curious about, and using those teachable moments to truly expand on those opportunities is vital.

Vignette: Five year old, Dasol, looked for every way possible to make learning physical. When a small staircase was introduced as an obstacle to prevent running from one side of the classroom to the other, Dasol instead considered it his personal launchpad to take two steps up the staircase and then leap into the other side of room!

Sitting in circle time was painful for him. He was eager to get up and go to work, often distracted others with side conversations or physical confrontations, and routinely asked, "When can we go outside?" But when outside, one of his favorite play activities was a dramatic game of good guys and bad guys where he was sometimes the one that got knocked off. This active, impetuous learner can actually play dead, absolutely still, for a significant period, when it fulfills his play narrative.

In response to Dasol's physicality and challenges to self-regulation, his teachers made meaningful and purposeful modifications to the environment and

schedule. Further, they negotiated verbal cues with Dasol that both communicated their expectations and respected his need for space and independence.

Language

Human language is a built-in genetic predisposition to connect, hard-wired into the brain. Michael A.K. Halliday (1975) crafted a framework describing seven language functions (Table 4). Children can use language to satisfy their needs and wants (instrumental), to control others (regulatory), to interact with others (interactional), to express thoughts and opinions (personal), to create an imaginary world (imaginative), to seek information (heuristic), and to communicate information to others (informative).

Halliday's language functions (1975)
- Instrumental
- Regulatory
- Interactional
- Personal
- Imaginative
- Heuristic
- Informative

Baron's language functions (1990)
- Affection
- Control
- Information
- Pedagogy
- Social exchange

Table 4: Two variants on language functions

A different set of five language functions proposed by Naomi Baron (1990) was explored by Josh Thompson (2001). In contrast with Halliday, Baron's functions addressed the same phenomenon of children's language use more informally. Children hear people use language of affection, such as "'Hi, Sweetie," and language of control, such as "Stop!" and "Come here." Speakers use language to share information, and to teach (pedagogy). Finally, people use language for social exchange, bonding, relationship building, and just "shooting the breeze."

Emergent literacy, the development and association of print with meaning, begins early in a child's life. When choosing books for the home or classroom library, effective teachers consider content, language

complexity, quality of illustration, and even diversity of the children (Thompson & Walker, 2017).

Literacy development for bilingual children is more complex and requires even greater meaningful observation. Second-language learners know a lot about their own language. When acquiring a second language, they will be driven to higher levels of cognitive flexibility (Kostelnik et al., 2015).

Vignette: Jake, an 18-month-old boy, had a rich play life, with dolls and trucks, blocks and balloons, side by side. He enjoyed hearing his dad read lots of books and often requests them, during play as well as rest times.

One day while he was playing at home with his older sisters and their dad, they heard a loud noise. Startled, Jake cried a bit but settled down quickly, though his lip still quivered and his eyes filled with tears. Taking comfort from his dad, he breathed deeply and then pulled his daddy's hand. "Go!" he said, leading his father to the bookshelf in another room.

He pulled a favorite off the shelf, *Where Is the Green Sheep?* (2004) by Mem Fox. His dad understood that reading was a good way to settle down after being startled, so he began reading the book from the beginning. Jake wouldn't have it, and quickly turned pages until he found the picture of a sheep quivering next to a diving board. "Where is the scared sheep?" his father read. Jake replied, "Uh-huh!" He didn't have the word to describe his experience, but he knew of a book with his feeling written down.

Aesthetic

Children have meaningful experiences in nature and the arts, and effective teachers watch for opportunities to integrate those experiences into the classroom. The aesthetic domain refers to children's' appreciation of natural beauty and their experience in the arts (art, music, dance, drama). Consequently, they make judgments and adopt preferences based on all the exposure and discovery provided to every child in the classroom. The final component of the aesthetic domain is rooted in creative-expression activities that allow children to truly engage with their materials and freely express their creativity (Kostelnik et al., 2015).

Teachers play a crucial role in providing high-quality aesthetic experiences for children. Integrating the arts into the curriculum and encouraging individual expression are best practices. When attentive and responsive teachers truly listen to the children's interests and take actions to capitalize on those interests, they create meaningful learning experiences.

Vignette: Ms. Brianna went with the children on a nature walk when the leaves were turning yellow, red, and brown. The children paused to examine the leaves, asking thoughtful questions as they walked. One child suggested collecting leaves of different colors. Ms. Brianna helped the children gather potential storage options from the classroom. The children chose buckets, wooden boxes, and even plates to bring back the leaves of all colors and sizes they would collect.

Once back in the classroom, the children explored how they wanted to use their treasures. Some children wanted to make collages, some wanted to store their leaves in the jars, and some wanted to put them in a folder. Other children painted with the leaves, and still others wanted to dance like the falling leaves. Ms. Brianna truly listened to the children and helped them carry out their vision for their leaves. With her thoughtful support and encouragement of expression, all the activities were possible.

Cognitive

High quality environments strongly influence cognitive development just as traumatic and chaotic environments negatively affect neural connections and cognitive growth. Piaget, Vygotsky, Bandura, and Siegler, who have studied cognitive processing in children (Kostelnik et al., 2015), suggest that children have a natural need to know about their world. The Kostelnik text divides fundamental knowledge for children into physical knowledge, logical-mathematical knowledge, representational knowledge, social-conventional knowledge, and metacognitive knowledge (Kostelnik et al., 2015). Asking children open-ended questions about topics that interest them fuels their enthusiasm for learning, a characteristic of meaningful observations.

As children develop their cognitive abilities, they solve more complex problems. Effective teachers strive to teach children, not curriculum. Examples of education models using this concept include Montessori, Reggio-inspired schools, and project-approach schools (Thompson, 2003). The children are guided to think about the problem from multiple

perspectives, and they are provided with many sensory, cultural, and problem layers related to real-world environments they actually live in. In addition, children are full of questions and spend a lot of energy discovering how things work. Preschoolers like to observe, try simple operations, and question adults with the ever-present "Why?"

Vignette: The 3-year-olds were discussing nature. "Where do trees come from?" one asked. This simple question grew as they developed an abundance of activities, lessons, and circle-time conversations for the entire class. Children placed seeds in zipper-type plastic bags and set them out directly on the window sills of their preschool classroom to watch roots emerge. Science was all around, as they explores the real world, with authentic, honest, and curious questions. Going outside daily provides opportunities to ask questions about trees, bugs, leaves, and our planet.

Emotional (Affective)

Learning about one's own emotions and understanding another person's feelings are crucial skills that children typically acquire in high quality environments (Stankovi -Ramirez & Dutton, 2016). Understanding one's own self and developing self-efficacy are key parts of typical emotional development.

Emotional intelligence has five distinct components: Self-awareness, social awareness, self-management, responding to decision-making, and relationship skills (Kostelnik et al., 2015). The effective teacher observes the emerging emotional capacity of

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children to cope with life stressors. The ability to make meaning of those observations helps children become more resilient (Duckworth, 2016).

The best place to see children's emotional capacity is to observe them at play. Effective teachers help children modify difficult behavior without hurting their perception of themselves. Also, helping children become effective problem solvers and express their thoughts, ideas, and feelings are life skills that all children need. Finally, integrating the rapport and connectedness in the classroom, together with support at home, help children build resilience.

Vignette: When Bluebird the class parakeet died, we discussed ways to clean up his cage, dispose of his body, and remember his life as a member of our class. Stories abounded– "Remember when he got loose and flew around the class and onto Margaret's shoulder?" "What about that time we ran out of bird food and had to give him Manuel's sandwich bread?" "I liked how he always tweeted back at me when I said hello to him in the morning." Artwork flourished—drawings, paintings, and clay model versions of Bluebird were created for weeks.

But the funeral was definitely the idea of one set of 5- and 6-year-old girls. These four girls ruled this class. There were plenty of boys and many other girls in this class as well, but this group led, dominated, and set the tone for class interactions and activities.

They wanted to dig a hole, say a prayer, and make a tombstone. Others just wanted to go outside to play, but this group of girls stuck by their beloved pet's side throughout recess time. They put glitter and stickers everywhere. They performed dances and recitals. This emotional expression and interaction used rituals to express our collective loss.

Social

The development of personal relationships, the skill of being able to effectively participate as a member of the group and appreciate the similarities and differences among people, are typical social skills a child must acquire. The four dimensions of social development are divided into social skills, socialization, social responsibility, and social studies (Kostelnik et al., 2015).

Effective teachers observe the social milieu and help children acquire these crucial skills. Most children understand that refusing to share toys will

make them an undesirable playmate, but learning what to do instead is the hard part of becoming socially equipped. The people they typically turn to in order to gain those skills are their parents, older siblings, and teachers.

Social skills are best learned during situations that arise in the classroom organically. For example, when a small group of children refuses to allow another child to join in the fun of playing in a particular area, the rejected child pouts and walks away. An effective teacher in this situation will give the child another option for play (Plank, 2016).

Vignette: Gabriella joined the classroom of an NAEYC-accredited center when she was 2 years old. She initially wanted to play with friends in the dramatic play center but did not know the rules of social engagement. She would often insist on having her own way or lash out at peers for not including her in their storylines.

As the school year progressed, Gabriella learned how to ask to join friends on the playground, in the science center, and in the block center. By observing, the teacher could see incremental progress throughout the school year. Gabriella began to form meaningful friendships with some of the children and delighted in interacting with those select peers.

At the end of the school year, the teacher observed and documented that Gabriella was showing emergent leadership skills during open-ended play. This longitudinal record of Gabriella's behavior demonstrated the development of her social skills.

Positive responses to PLACES

Using any one of the domains of development to understand the culture of childhood tends to fragment the observer's understanding of the child. Such a piecemeal approach denies the integration and cross-pollination that occurs in authentic early childhood environments.

But incorporating the PLACES tool to integrate and organize observation protocols keeps the experience real. These are real children encountering life, and the PLACES tool helps the attentive observer gather details from discrete domains while also contextualizing the piece within a whole-child view of the experience.

Instead of an overwhelming task of observing everything at once, teachers and educators now have a tool to systematically examine the parts that create

the whole child. For example, effective teachers have always integrated the arts into their classroom experiences but didn't have a way to equally value their impact on the child's total development.

Undergraduates have reported delight in using this tool to enhance their observation assignments: "I felt like I better understood what was happening right before my eyes." Graduate students have expressed appreciation for having another layer of explanation and definition to their work: "I watch master teachers up and down my hallway, and I see this holistic view of the child, and I truly wonder how they maintain all the various demands and requirements of teaching. By using this PLACES observation tool, I can see how master teachers I admire truly integrate a whole-child view of the child, and of their teaching."

Teachers have reported this tool helps them segment and focus their observation experience. One teacher said that she effectively watched for safety and obvious elements of student activity. Now with this PLACES tool, she can look behind the screen and see the whole child in all its glory.

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