

# Overlapping Developmental Domains

by Craig Gibson

*“The environment itself will teach the child, if every error he makes is manifest to him, without the intervention of a parent or teacher, who should remain a quiet observer of all that happens.”*

— Maria Montessori

When I first started working in the field of early intervention, as a lead evaluator on a multidisciplinary evaluation team, I would view each developmental domain as a separate entity. Little did I know at that time that each area of domain overlaps the other, and in order for me to be truly effective in assessing children’s developmental abilities, I needed to change my mindset in how I evaluated children. This, of course, required me to ‘think outside the box,’ an imperative if I were going to grow in my role as an early childhood professional. Here I lay out the five domains of development and examine how each discipline has a direct influence on the other.

## The Five Developmental Domains

**Cognition:** Thinking and learning skills

**Communication:** Expressive and receptive language skills

**Social and Emotional:** Ability to relate and interact with peers and adults

**Physical Development:** Fine- and gross-motor skills

**Adaptive Behavior:** Self-help skills

## Assessing the Child Holistically

Whether you are an educator, a program director, or the parent of a young child, it is important to simultaneously keep all five areas of development in mind when assessing children’s abilities. This is especially critical as one area of deficit can have a negative influence on another, and in order for one to have a thorough understanding of a developmental area of concern, we first need to find the ‘root cause.’ For example:

If child is unable to follow multi-step directions, it may be due to a receptive language concern (i.e., auditory processing), and not due to an unwillingness to follow those directions.

Or perhaps the child is unable to independently complete age-appropriate fine-motor tasks such as stacking blocks. In this case, he may have difficulty using his two hands together in a coordinated manner to complete fine-motor tasks. Fine-motor deficits can also affect a child’s self-help skills such as toileting, hand-washing, eating, dressing, etc.

Only when we identify the ‘root cause’ of a child’s perceived deficit(s) can we then take the next step in addressing the issue(s). Children who possess deficits in one or more areas of development may have difficulty not only accessing the curriculum and playing cooperatively alongside their peers, but might also have trouble performing adequately at home and when out in the community. Therefore, it is important to note that one area of deficit can directly affect another across *all* environments of a child’s life.

To compartmentalize each area of the five areas of developmental domain makes it very difficult to be an effective observer of children. Below, I provide some examples of how one area of development can have a direct influence on another.

## Cognition and Communication Skills

These two domains are closely related in that cognition affects communication and vice-versa. For example:



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If a child's expressive language skills are delayed, he may have difficulty expressing to others what he knows and understands. In other words, if a three-year-old child has only 20 words in his spontaneous speech, he may not be able to demonstrate his knowledge of age-appropriate concepts.

Certainly he may possess this knowledge, but if he is unable to express it using his words, how can we know for sure?

Likewise, a child may have an age-appropriate expressive vocabulary, but if his receptive language skills (e.g., ability to process/comprehend and make sense of what others say) are weak, he will, undoubtedly, be unable to demonstrate his understanding of such concepts. Weak skills in the area of receptive language will also impact the child's ability to successfully follow basic single and multi-step directions.

## Communication and Social-Emotional Development

Communication has a direct effect on a child's ability to socialize and interact with his peers. For example:

If a child's expressive language skills are weak, this will hinder his ability to form lasting relationships with other children. If a five-year-old child has a vocabulary of approximately 50 words in his spontaneous speech, this, without question, will have an adverse affect on his ability to interact with his peers. True, he may be able to spontaneously use single words, but his limited vocabulary will hinder his ability to put those words together to form sentences or phrases.

Likewise, if a child's speech is difficult to understand (e.g., articulation/speech clarity), this will also affect his ability to interact and socialize with his peers, as they may have a difficult time understanding what he is trying to say. On the other hand, if the child possesses solid communication skills, but has difficulty relating to others, this will most definitely impact his ability to form relationships with his peers.

## Communication and Physical Development

Okay, we know that communication consists of both expressive and receptive language development. We also know that physical development consists of both a child's fine-

If a child's expressive language skills are delayed, he may have difficulty expressing to others what he knows and understands.

and gross-motor skills. If a child is weak in the area of receptive language, this will adversely affect his ability to perform fine-motor and gross-motor tasks. For example:

If a child has difficulty processing basic directions, and you ask him to draw a square and a

triangle on a piece of paper, he may have processed the first direction (drawing the square), but not the second direction (drawing the triangle).

In the same way, let's say that your class is participating in a gross-motor activity where the children are required to complete an obstacle course. The child who possesses weak receptive language skills may not be able to follow multi-step directions, needing the steps broken down for him, coupled with verbal and/or visual prompts and cues.

## Physical and Social-Emotional Development

If a child has deficits in the areas of fine- and/or gross-motor development, this could also affect his ability to interact with his peers. For example:

If a child has poor dexterity (e.g., ability to use hands and fingers to perform fine-motor tasks), he may have difficulty stacking blocks, completing puzzles, holding writing utensils, or cutting with scissors. Given that children are offered opportunities to participate in many of these tasks with their peers (such as when working together to construct a block design), the child who has difficulty completing these tasks may have difficulty relating to the child who is able to complete such tasks easily.

Similarly, the child who has poor balance and coordination (gross-motor skills), may have difficulty climbing playground equipment, running, jumping, and kicking and throwing a ball. This, inevitably, will have an adverse effect on the child's ability to participate with his peers during gross-motor play.

## Adaptive Behavior and Communication Skills

The child who is weak in the areas of receptive and/or expressive language development may have difficulty performing basic self-care tasks. For example:

If the child has a poor expressive vocabulary, he may not be able to effectively verbalize his bladder needs. Likewise, if

the child is in pain, and cannot express this in words, how are we to know? On the other hand, the child may have strong expressive language skills but poor skills in the area of receptive language. If this is the case, the child may have difficulty sequencing skills to complete basic tasks in order to complete various tasks such as handwashing. In other words, he may need verbal and/or visual cues to help him know what comes first, second, third, etc. (sequential skills) with regard to washing and drying his hands.

## Physical Development and Adaptive Behavior

Children who have poor dexterity skills (e.g., ability to use their hands and fingers to perform fine-motor tasks) may have difficulty performing basic self-care tasks. For example:

The child who has deficits in the area of fine-motor ability may have difficulty manipulating snaps, buttons, and zippers. He may also have difficulty putting on and tying his shoes. During snack or lunch, he may have trouble holding eating utensils and/or a cup.

As you can see, fine-motor deficits adversely affect a child's skills in a number of areas related to his self-care.

## Cognition and Social-Emotional Development

Children who possess cognitive deficits may also have difficulty interacting and relating to other children who do not possess these deficits. For example:

We know that children around the age of four years should have a basic understanding of simple vocabulary concepts such as positional directions (e.g., next to, beside, under, on top of, and in back of), in addition to comparison concepts (e.g., big/little, heavy/light, hard/soft). At age four, children should also be able to perform basic matching and sorting tasks, in addition to counting up to 10 and completing tasks that require problem-solving skills.

Children with cognitive deficits may have difficulty performing these basic tasks, which may affect their ability to interact and socialize with their peers.

**Weak skills in the area of receptive language will also impact the child's ability to successfully follow basic single and multi-step directions.**

## Global Delays

Children who possess global delays may have deficits in all five areas of development. The child with global delays may be unable to independently:

- Complete basic self-care tasks (adaptive behavior)
- Demonstrate her knowledge of age-appropriate concepts (cognitive development)
- Follow basic directions (receptive language development)
- Express her wants, needs, thoughts, or ideas (expressive language development)
- Interact and socialize with peers and adults (social-emotional development)
- Perform fine-motor and/or gross-motor tasks (physical development).

A child who has delays across all developmental domains may have difficulty successfully participating in early childhood activities alongside her non-disabled counterparts. As you can see, one area of development might affect another. Therefore, developmental domains should not be viewed as separate entities.

## Getting Help

If you suspect a child has a delay or disability in one or more areas of development, there is help available. In 1986, the Federal law created a mandate where infants and toddlers with disabilities or delays are eligible for early intervention services. Children who qualify for services may receive help in one or more areas of developmental domain (i.e., cognition, communication, social-emotional, physical, or adaptive behavior). Best of all, the services are free of charge to parents, as each state is provided with grant money from the Federal government to fund the services. The purpose of early intervention is to maximize a young child's potential in one or more areas of development, depending on the needs of the individual child.

If you have concerns about a child's development in one or more areas of development, contact your local early intervention agency. A team of professionals will evaluate the child for services (free of charge) and determine, based on their assessment, the best course of action. If the evaluation results indicate a need for services, a team of early childhood professionals will work collaboratively with you and the child's parents/guardians to meet his or her developmental needs.

It is important to note that classroom teachers are not clinicians. However, having a basic understanding of how one area of development can affect another makes us more effective in our roles as early childhood professionals and also allows us to make appropriate recommendations, once the 'root cause' of concern is identified.

## Resources

### Organizations

Child Development Institute:  
[www.childdevelopmentinfo.com](http://www.childdevelopmentinfo.com)

First Signs: [www.firstsigns.org](http://www.firstsigns.org)

The National Association for Child Development:  
<http://nacd.org>

### Publications

Eliot, L. (2000). *What's going on in there? How the brain and mind develop in the first five years of life*. New York: Bantam.

Pretti-Frontczak, K., & Bricker, D. D. (2004). *An activity-based approach to early intervention*. Baltimore, MD: Brookes Publishing.

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### World Forum Working Group on Inclusion

The Working Group on Including Children with Special Needs held a day-long discussion and two panel presentations at the 2011 World Forum on Early Care and Education in Honolulu, Hawaii. There, we realized the critical need for a permanent Working Group on Inclusion, fueled in part by the statistics reported in Betz's UNESCO Policy Brief on Early Childhood presented at the 2009 World Forum in Belfast:

"Worldwide, there are about 650 million persons with disabilities. This accounts for 10% of the global population, and constitutes more than 20% of the world's poorest people. Children with disabilities experience stigma from birth and are more prone to exclusion, concealment, abandonment, institutionalization, and abuse. Mortality rates among children with disabilities are 80%, even in countries where under-five mortality has declined below 20%. Strikingly, 98% of children with disabilities in developing countries do not attend school."

We discussed both the challenges and accomplishments of working with children with disabilities in our respective countries, including prevention, identification, cultural considerations, successful practices, funding concerns, working with families, and much more. Our discussions and deliberations have re-fueled the determination of the delegates to work together to promote inclusion, and we are determined to work toward fulfilling the early childhood education charge of the Convention on the Rights of Persons with Disabilities (CRPD), advocating early assessment, intervention, and inclusion for our youngest children worldwide. We invite you to join us.

— Roberta J. Goldberg, Ph.D., United States • Kirsten Haugen, United States • Anne Sivanathan, Malaysia  
• Deepak Raj Sapkota, Nepal

To read our full report, please visit [www.worldforumfoundation.org/inclusion](http://www.worldforumfoundation.org/inclusion)