

The Growing Brain: From Birth to 5 Years Old

A ZERO TO THREE Curriculum for Early Childhood Professionals

The crucial development of the growing brain is one of the most important topics in early childhood development. Research on the topic is exploding, underscoring the need for early childhood professionals to stay up-to-date on brain development and strategies to best support the growing brains of the infants and young children in their care.

ZERO TO THREE's *The Growing Brain* is an innovative professional development that provides a toolkit of how the brain develops, along with science-supported practical ways that early childhood professionals can encourage healthy brain development in children from birth to 5 years old.

The Growing Brain is an innovative course that provides a toolkit of how the brain develops step-by-step, neuron-by-neuron. The series of 7 in-person units provides explanation of brain processes and the effects of outside influences.

This training curriculum covers:

- both the architecture and neurobiology of brain development
- supporting language, cognition, prosocial behavior, and social-emotional development
- reducing toxic stress that can negatively influence brain development of very young children

Unit Descriptions

Unit 1 – The Basics

Unit 1 focuses on how the brain grows and develops from conception through 5 years old. In this training, you will learn the names of different parts or regions of the brain and their functions; gain an understanding of how nerve cells communicate and connect; learn about neuroplasticity; and examine the role of early experiences in making connections between areas of the brain.

ZERO TO THREE Competencies for Prenatal to Age 5 (P-5) Professionals - Domain 1: Early Childhood Development & Domain 3: Relationship-Based Practice

Unit 2 – Factors Affecting Brain Growth and Development

Unit 2 focuses on the key factors that affect brain development and how to support healthy brain development overall. In this training, you will identify factors that affect brain growth and development; understand how stress can affect brain development; and learn strategies (the 5 R's) for supporting healthy brain development.

ZERO TO THREE Competencies for P-5 Professionals - Domain 1: Early Childhood Development, Domain 3: Relationship-Based Practice & Domain 4: Health and Developmental Protective and Risk Factors

Unit 3 – Communication and Language Development

Unit 3 focuses on communication and language skills that develop in the first 5 years, the brain's role in the development of these skills, and how to support them. In this training, you will learn about specific communication milestones and when they typically emerge and how this relates to brain development; learn strategies for supporting early communication skills; and gain an understanding of how multilanguage learning occurs.

ZERO TO THREE Competencies for Prenatal to Age 5 (P-5) Professionals - Domain 1: Early Childhood Development, Domain 3: Relationship-Based Practice & Domain 5: Cultural and Linguistic Responsiveness

Unit 4 – Cognition and Executive Function

Unit 4 focuses on how young children develop cognitive and executive functions in relation to the developing brain. In this training, you will learn how cognitive development unfolds in young children and how to support its development in young children; learn about executive functioning and its critical role in cognitive and overall development; and how to support the development of executive functions.

ZERO TO THREE Competencies for P-5 Professionals - Domain 1: Early Childhood Development

Unit 5 – Social-Emotional Development

Unit 5 focuses on how social-emotional development unfolds in the first 5 years and the brain's role in this process. In this training, you will learn about the areas of the brain involved in social interactions and emotional reactions; explore the role of relationships and attachment in social-emotional development; the effect of stress on social-emotional development; the development of empathy in very young children and how to support social-emotional development in young children.

ZERO TO THREE Competencies for P-5 Professionals - Domain 1: Early Childhood Development, Domain 2: Family-Centered Practice & Domain 3: Relationship-Based Practice

Unit 6 – Understanding Behavior

Unit 6 focuses on how children's behavior is influenced by the brain. In this training, you will learn about basic brain anatomy; connections between areas of the brain and how these connections are expressed through behavior; key factors that influence behavior; the root causes of challenging behavior and effective strategies for helping children with these difficulties.

ZERO TO THREE Competencies for P-5 Professionals - Domain 1: Early Childhood Development & Domain 4: Health and Developmental Protective and Risk Factors

Unit 7 – Play

Unit 7 focuses on the stages and types of play that unfold in early childhood, the role of the brain in this process, and how to maximize children's learning through play. In this training, you will learn about the development of play; the differences between free and guided play; and core skills children develop through play and how to promote these skills.

ZERO TO THREE Competencies for P-5 Professionals - Domain 1: Early Childhood Development

The greatest rate of brain growth and development takes place during the first few years of life. The day-to-day interactions between an early child care provider and an infant or young child set the young child on his or her course of brain development.



ZERO to THREE
Early connections last a lifetime

The Growing Brain: From Birth to 5 Years Old is brought to you by ZERO TO THREE Professional Development and Workforce Innovations. PDWI aims to elevate the knowledge, skills, and abilities of the early childhood development field.

For additional professional development resources and trainings, visit www.zerotothree.org/PDWI.

