

Infant Cognitive Ability Pillars of Excellence Resources

Infant Cognitive Ability

Learning Objectives:

- Participant will discover the cognitive development of infants and report.
 - Participant will discuss and reflect on the information considering their previous understanding or infant cognition.
 - Participant will consider activities and engagement that they will use to support cognitive development.
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1. Elizabeth Spelke is the Marshall L. Berkman Professor of Psychology at Harvard University and an investigator at the NSF-MIT Center for Brains, Minds and Machines“ During infancy, the baby and caretakers communicate through facial expressions and gestures and sounds. We described this process in detail in What Babies Say Before They Can Talk: The Nine Signals Infants Use to Express Their Feelings. All babies have a universal, inherited, built-in signaling system with which they both send and receive signals. This signaling is done especially through the facial expressions and vocalizations. These signals are called feelings - such as joy, surprise, anger, and fear.
<https://www.webmd.com/parenting/baby/features/stages-of-development>
2. "Cognition is the process of acquiring knowledge and understanding through experience, the senses and thought. Development of Infants 0 to 12 months." Alision Gopnik, Professor of psychology and affiliate professor of philosophy at the University of California. Her work is in the areas of cognitive and language development, specializing in the effect of language on thought, the development of a theory of mind and causal learning.

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3. Darcia F. Narvaez Ph.D., Moral Landscapes, Dangers of "Crying it Out" The practice comes from a misunderstanding of child development. Posted Dec 11, 2011, When they are left to cry, we look for answers from neuroscience. Not the traditions or old wife's tales. Neuroscience research tells us that: "that letting babies get distressed is a practice that can harm children and their relational capacities in the long term." We now understand the effects that consistent long-term stress can have on children. This can begin in infancy, influencing thought processes and more.
4. In probability theory and statistics, Bayes' theorem (alternatively Bayes' law or Bayes' rule) describes the probability of an event, based on prior knowledge of conditions that might be related to the event. Dr Narvaez is also the author of: The author of The Philosophical Baby, The Scientist in the Crib and other influential books on cognitive development, Gopnik presents evidence that babies and children are conscious of far more than we give them credit for, as they engage every sense and spend every waking moment discovering, filing away, analyzing and acting on information about how the world works.
5. ScienceDaily: What Are Babies Thinking Before They Start to Speak, July 22, 2004, Vanderbilt University.
6. Susan Newman Ph.D., Singletons, Psychology Today, Posted Jul 31, 2014
7. <https://www.psychologytoday.com/us/blog/singletons/201407/how-digital-devices-affect-infants-and-toddlers>
8. <https://www.scientificamerican.com/article/babies-think-logically-before-they-can-talk/>, Bret Stetka, March 15th, 2018,
9. Bret S. Stetka, MD. Bret S. Stetka is a graduate of the University of Virginia School of Medicine in Charlottesville, Virginia, and received his BS in biology from the College of William and Mary in Williamsburg, Virginia. He has worked as a writer and editor at Medscape since 2007.
10. Russell T Hurlburt Ph.D., Pristine Inner Experience, Psychology Today, <https://www.psychologytoday.com/us/blog/pristine-inner-experience/201111/thinking-without-words>, accessed 9.23.19. Hurlburt, R. T., & Akhter, S.A. (2008). Unsymbolized thinking. *Consciousness and Cognition*, 17, 1364-1374. and Hurlburt, R. T., & Akhter, S.A. (2008). Unsymbolized thinking. *Consciousness and Cognition*, 17, 1364-1374.
11. RESPONSIVE LEARNING ENVIRONMENTS, this document was developed with funds from Grant #90HC0012 for the U.S. Department of Health and Human Services, Administration for

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Children and Families, Office of Head Start, and the Office of Child, Care by the National Center for Early Childhood Development, Teaching, and Learning.

12. Pointing Behavior in Infants Reflects the Communication Partner's Attentional and Knowledge States: A Possible Case of Spontaneous Informing

Xianwei Meng^{1*}, Kazuhide Hashiya², Graduate School of Human-Environment Studies, Kyushu University, Fukuoka, Japan, 2 Faculty of Human-Environment Studies, Kyushu University, Fukuoka, Japan

13. RESPONSIVE RELATIONSHIPS ARE THE HEART OF INFANT/TODDLER CURRICULUM, National Center on Early Childhood Development, Teaching and Learning, Teacher Time.

14. Infant/Toddler Curriculum and Individualization, Office of Child Care: Administration for Children and Families, U.S. Department of Health and Human Services. This module was created through the National Infant & Toddler Child Care Initiative @ ZERO TO THREE, a project of the federal Office of Child Care, in response to a request for technical assistance from the Connecticut Head Start State Collaboration Office on behalf of Healthy Child Care New England, a collaborative project of the six New England states. We would like to acknowledge the inspiration and contributions of Grace Whitney, PhD, MPA, Director of the Connecticut Head Start Collaboration Office, as well as the contributions of the New England project advisory team, the Region I Administration for Children and Families, Office of Child Care, and the New England Child Care and Development Fund Administrators. This document was prepared under Contract # 233-02-0103 with the Department of Health and Human Services. The views expressed in the document are those of the contractor. No official endorsement by the U.S. Department of Health and Human Services is intended or should be inferred.

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LEARN MORE:

EARLY ESSENTIALS WEBISODE 7 ENVIRONMENTS:

<https://eclkc.ohs.acf.hhs.gov/video/early-essentials-webisode-7-environments>

CREATING ENVIRONMENTS THAT INCLUDE CHILDREN'S HOME LANGUAGES AND CULTURES:

<https://eclkc.ohs.acf.hhs.gov/sites/default/files/pdf/dll-creating-environments.pdf>

ENVIRONMENTS THAT SUPPORT HIGH QUALITY INCLUSION (INCLUDES INFORMATION ON UNIVERSAL DESIGN PRINCIPLES):

<https://eclkc.ohs.acf.hhs.gov/video/environments-support-high-quality-inclusion>

LEARNING ENVIRONMENTS (LANDING PAGE WITH RESOURCES ABOUT CREATING LEARNING ENVIRONMENTS THAT ARE RESPONSIVE TO THE NEEDS OF YOUNG CHILDREN AND THEIR FAMILIES):