

# Child Development and Early Learning: Early Learning & Development Theory & Philosophy

Initial Practice Based Professional Standards for Early  
Interventionists/Early Childhood Special Educators (EI/  
ECSE)

1.4



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# Standard 1

Candidates understand the impact of different theories and philosophies of early learning and development on assessment, curriculum, instruction, and intervention decisions. Candidates apply knowledge of normative developmental sequences and variations, individual differences within and across the range of abilities, including developmental delays and disabilities, and other direct and indirect contextual features that support or constrain children's development and learning. These contextual factors as well as social, cultural, and linguistic diversity are considered when facilitating meaningful learning experiences and individualizing intervention and instruction across contexts.



# Component: 1.4

- Candidates demonstrate an understanding of characteristics, etiologies, and individual differences within and across the range of abilities, including developmental delays and disabilities, their potential impact on children's early development and learning, and implications for assessment, curriculum, instruction, and intervention.



# Objectives

- Identify characteristics and etiologies of conditions that may cause developmental delays and/or disabilities
- Describe individual differences within and across the range of conditions likely to cause developmental delays and/or disabilities
- Describe the impact of developmental delays and/or disabilities on learning and development
- Describe the impact of developmental delays and/or disabilities on: assessment, curriculum, intervention and/or instruction



# Discussing Etiologies and Conditions That Impact Learning and Development

- Children across abilities must be seen as fundamentally competent rather than flawed or deficient
- Value is not defined by a set of skills but by who they are
- Intervention provided not to erase an essential “deficiency” but to promote optimal participation in all aspects of home, school, and community



# Early Learning

- Babies are born learning
- Young children learn through play, exploration of their environment
- Interactions with adults and peers are important to development
- Children benefit from a rich learning environment in their homes and communities

# Factors That Influence Learning and Development

- Many factors influence how children develop
  - Genetics
  - Environmental influences
    - Prenatal and antenatal influences
  - Early experiences



# Genetics and Environment: Epigenetic Factors

- Environmental factors can influence the way genes are expressed
- Inherited vulnerabilities can be informed by multiple genes, then influenced by environment before/after birth
- May be a variable in conditions of unknown etiologies, e.g., autism, autoimmune diseases, mental health conditions





# Congenital Abnormalities

- Characteristics present at birth that affect appearance, development, or function
- Caused by issues during the fetus's development before birth



# Causes of Congenital Abnormalities

- Chromosome abnormalities
  - Chromosomes are missing or duplicated
- Single-gene abnormalities
  - Autosomal dominant inheritance
  - Autosomal recessive inheritance
  - X-linked conditions
  - X-linked dominant conditions



# Causes of Congenital Abnormalities

- Conditions during pregnancy
  - Certain maternal illnesses
  - Chronic maternal conditions
  - Maternal alcohol or substance use
  - Eating raw or uncooked foods
  - Certain medications



# Examples: Inherited Congenital Abnormalities

- Down Syndrome
- Fragile X Syndrome



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# Down Syndrome

- Condition caused by having extra copies of genes on the 21st chromosome
- Extra gene change development during pregnancy and continue to have effects throughout an individual's lifetime



# Down Syndrome Continued

- Increased risk of medical conditions: congenital heart defects, respiratory and hearing problems, childhood leukemia, thyroid conditions
- All people with Down syndrome experience cognitive delays, but the effect ranges from mild to moderate



# Fragile X Syndrome

- Common cause of intellectual disability
- Changes occur in the genetic material in each cell of the body



# Characteristics of Fragile X Syndrome

- Delays in walking, talking, or toilet training
- Learning disabilities
- Ear infections
- Trouble sleeping
- Seizures
- Symptoms of autism
- Sensory difficulties





# Activity

- Break into 2 groups
- One group will review the facts about [Down Syndrome](#) and the other [Fragile X Syndrome](#)
- Identify specific implications for assessment, curriculum, instruction, and intervention for young children with these conditions in EI/ECSE practice



# Conditions of Unknown Etiology

- Many conditions that impact development appear to be multiply-determined
- Research continues to explore the etiology of many developmental disorders, including autism spectrum disorder and other neurodevelopmental conditions, Cerebral Palsy, and many others

# Autism Spectrum Disorder (ASD)

- Core differences in:
  - Social communication/interaction
  - Restrictive, repetitive patterns of behavior
- Almost half of the children with ASD have average/above average intellectual ability
- Early intervention improves long-term outcomes for all levels of severity



# ASD: Identification and Prevalence

- 1 in 54 children
  - 4X more boys than girls identified
- Although ASD can be identified as early as 18 months or earlier, the average age of diagnosis is ~ 4 years of age
- Most parents/caregivers notice a problem by 36 months of age



# Signs and Symptoms of ASD

Early signs of ASD can include but are not limited to:

- Reduced eye contact/does not prefer to look at faces
- Rarely or does not point/show to share focus of interest
- Delayed onset of verbal language
- Unusual ways of moving hands, fingers, body
- Develops rituals such as lining things up, repeating things



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# Intervention Targets: ASD

- Nonverbal communication/joint attention
- Social engagement – increased interactions
- Social initiations and responses
- Verbal language
- Challenging behaviors



# Interventions and Supports

- Behavioral therapy
  - For young children: Naturalistic Developmental Behavioral Interventions (NDBIs) such as the Early Start Denver Model
- Speech-language Therapy
- Occupational Therapy
- Early Childhood Special Educator
- Supports for the family and children at home and in inclusive childcare/ school settings



# Conditions of Unknown Etiology: Cerebral Palsy (CP)

- Most common disability affecting motor control
- Caused by abnormal brain development or injury
- Can be mild, moderate, or severe
- A lifelong condition





# Risk factors for CP

- Low birthweight/prematurity/multiple births
- Infections during pregnancy
- Jaundice
- Maternal medical conditions
- Birth complications

# Cerebral Palsy, Continued

- Every child is different and ongoing screening and care is important
  - Learning difficulties
  - Seizures/epilepsy
  - Vision difficulties
  - Hearing loss



# Activity

- Visit the CDC Website: [11 Things to Know about Cerebral Palsy](#)
- Explore each tab and identify information you think will be helpful to know in your work with young children with CP.
- What accommodations/adaptations might be needed to support full access to learning at home? At school?

# Conditions Associated with Maternal Substance Use

- Infants chronically exposed to opioids in utero are often born with [Neonatal Opioid Withdrawal Syndrome](#) (NOWS)
- Long-term opioid use has also been linked to preterm birth, stillbirth, and specific birth defects



# Neonatal Opioid Withdrawal Syndrome

- Central nervous system irritability
- High pitched continuous crying
- Decreased sleep
- Tremors, sneezing, sweating
- Increased muscle tone
- Seizures
- Feeding difficulties
- Increased respiratory rate



# Neonatal Opioid Withdrawal Syndrome

- Mom is medicine: [Eat, Sleep Console](#)
  - Breastfeeding encouraged when mothers are stable for > 90 days
  - Early bonding improves outcomes for both
  - Mothers do better when stigma is removed
- Early intervention mitigates risk for developmental delays and disability

# Fetal Alcohol Syndrome Disorders

- [Fetal Alcohol Spectrum Disorders](#) (FASD): variety of disorders that can occur when a pregnant woman drinks alcohol



# Signs/Symptoms of FASD

May demonstrate:

- Abnormal facial features
- Vision or hearing problems
- Hyperactive behavior
- Difficulty with attention
- Learning disabilities
- Speech and language delays
- Poor coordination





# FASD: Intervention and Protective Factors

- Early diagnosis and intervention to support healthy self-regulation and attention skills, social-communication, and cognitive development
- Individualized curriculum and instruction geared toward functional and inclusive outcomes
- Stable home environments
- Supportive communities



# Activity

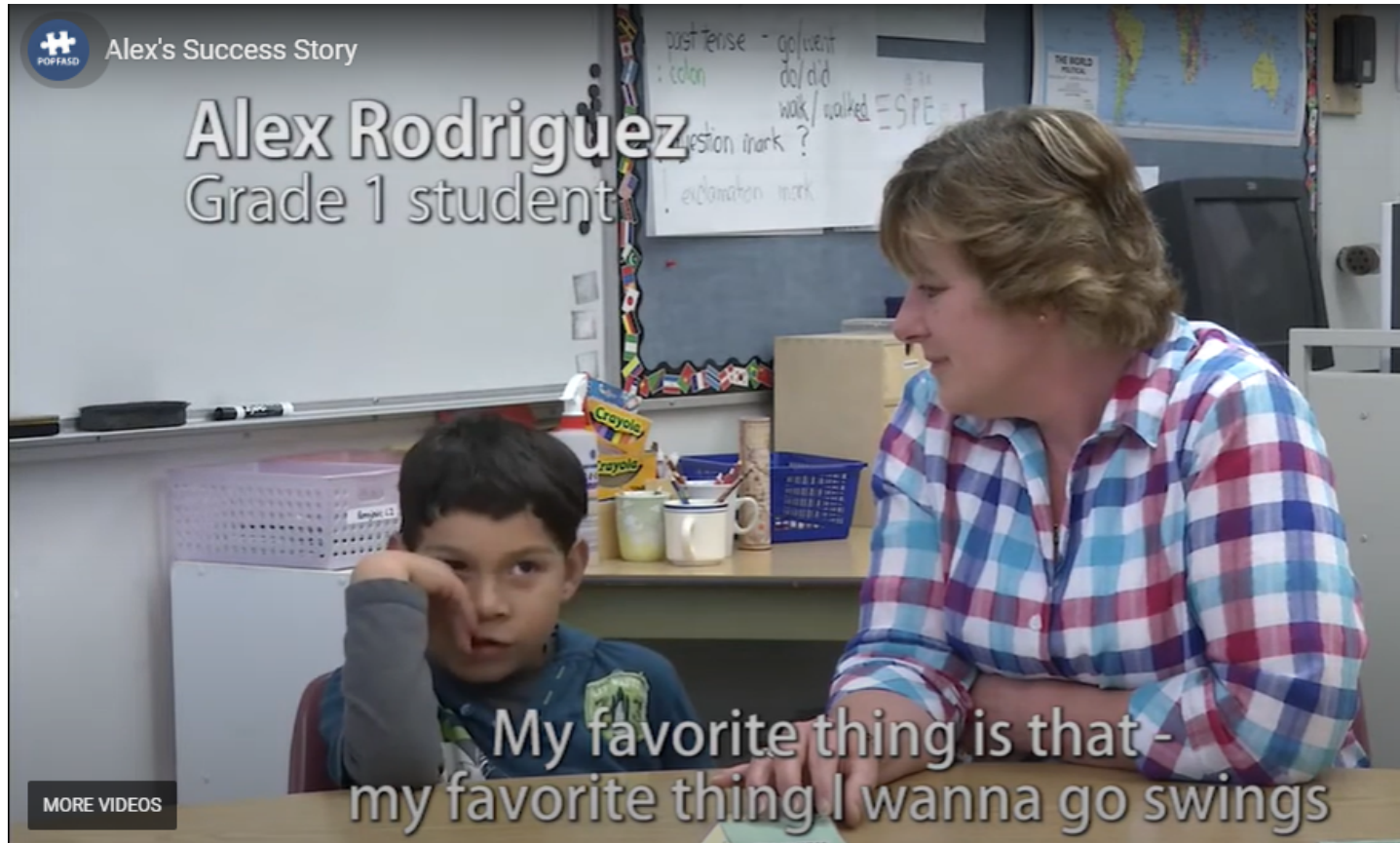
Watch Alex's Success Story on the next slide before discussing the following questions;

- What adaptations and accommodations were developed by Alex's team to optimize his participation and learning in school?
- How did these support his ability to self-regulate and remain engaged in learning routines?
- How did his teachers include Alex's family in everyday educational planning?



# Activity

Watch [Alex's Success Story](#)



[https://youtu.be/fQdTMg\\_6VLU](https://youtu.be/fQdTMg_6VLU)



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# Intellectual Disability

- Diagnosed through standardized tests <70 IQ
- Must show deficits in 2 or more specific areas of adaptive behavior
- Present before birth unless the result of an injury



# Signs of ID in Young Children

- Meet global milestones later than other children
- Difficulty in acquiring communications skills
- Difficulty interpreting and applying new information
- Difficulty with adaptive skills/tasks of daily living



# ID: Risk Factors

- Intellectual disabilities can have a variety of causes
  - Hereditary disorders (phenylketonuria (PKU))
  - Early alterations in the embryo's development
  - Exposure to toxic substances or infections in utero
  - Low oxygen at birth, traumatic brain injury
  - Early social deprivation



# Supporting Children with ID

- Support family stability
- Promote adult and peer responsiveness and warm nurturing relationships
- Implement intentional sequencing of learning activities
- Create an individualized and supportive environmental structure to ensure inclusion in everyday environments



# References and Resources

- Berk, L. (2019). Child Development, Pearson, 10<sup>th</sup> Ed.
- [Centers for Disease Control: Down Syndrome](#)
- [National Fragile X Foundation](#)
- [Autism Navigator: Early Signs of Autism](#)
- [Centers for Disease Control: 11 Things to Know about Cerebral Palsy \(CP\)](#)





# References and Resources

- Patrick SW, Barfield WD, Poindexter BB, AAP Committee on Fetus and Newborn, Pediatrics. 2020;[146\(5\):e2020029074](#)
- California Health Care Foundation: [Opioid-Dependent Newborns Get New Treatment: Mom Instead of Morphine](#), 2019

# References and Resources

- Schreibman L, Dawson G et al., Naturalistic Developmental Behavioral Interventions: Empirically Validated Treatments for Autism Spectrum Disorder. J Autism Dev Disord. 2015 Aug;[45\(8\):2411-28](#)
- [Centers for Disease Control \(2021\) Fetal Alcohol Syndrome Disorder](#)



# References and Resources

- [Centers for Disease Control: Facts About Intellectual Disability \(2021\)](#)
- Child Mind Institute, 2021: [Intellectual Disabilities](#)
- Guralnick, M.J. (2017). [Early Intervention for Children with Intellectual Disabilities: An Update.](#)  
*Journal of Applied Research in Intellectual Disabilities*, 30, 211-229



# Disclaimer

This is a product of the Early Childhood Personnel Center (ECPC) and was made possible by Cooperative Agreement #H325B170008 which is funded by the U.S. Department of Education, Office of Special Education Programs. However, those contents do not necessarily represent the policy of the Department of Education, and you should not assume endorsement by the Federal Government.



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