

# Week 5: Normal & Exceptional Development, and Developmental Disabilities

## *Chapters 4 & 5*

### I. Highlights

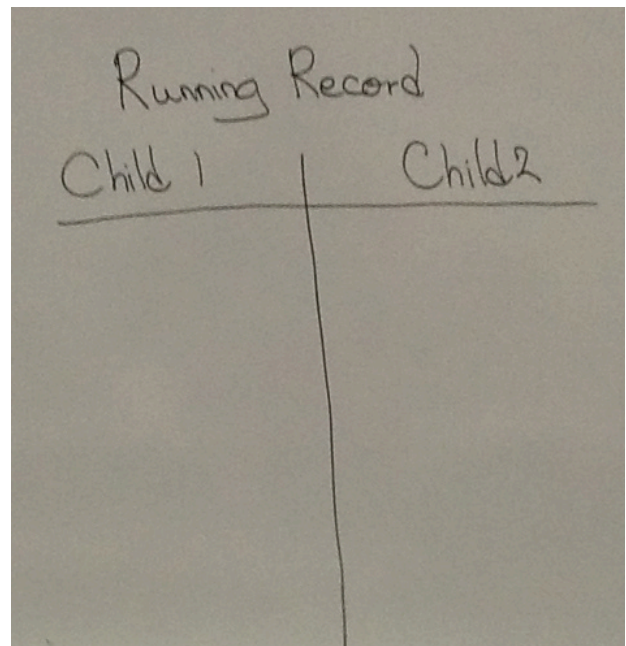
- A. “Typical development” is the usual sequence of growth and development we expect most children to show at each age. “Atypical development” is anything outside of that range of normal.
- B. “Typical” is still a wide range and influenced by typical biological development, environmental or cultural factors, and individual differences.
- C. “At-risk” children (low income, alcohol during pregnancy, etc.) are more likely to have a developmental disability, should be watched more carefully.
- D. Two most important parts of our job: building relationships, and careful observation
- E. Remember “person-first language” — they’re children first! They also are more alike than different from children without disabilities.
- F. Classification/ diagnosis can help get the right services, but can also change our perceptions and expectations of the child once they’re labeled. Be careful.
- G. Poverty increases a child’s risk of developmental disability a lot.
- H. Developmental disabilities can occur at any stage of life
- I. Disabilities are categorized by the government: learning disability, speech delay, autism, mental retardation, emotional / mental health disorders, multiple (combination) disabilities, orthopedic impairments, hearing loss, and visual impairment
- J. Congenital (at birth) disabilities may be due to genetics, or prenatal infections or toxins (illness, drugs, etc.)

## II. Homework

- A. Parent/ child observation and interview due next week
- B. We'll get the midterm study guide next week
- C. Get a Scantron before the midterm in two weeks

## III. Program Observation Assignment (due 3-25-14)

- A. Observe for 60 minutes (1 hour) taking a running record with time sampling
  1. Time sampling = 5-10 minutes per child, alternating back and forth (or both at the same time if they're interacting)
  2. Notes on everything they do / say / how they interact
- B. Observe one child who is typically developing and one who has special needs so you can compare/contrast
- C. Paper has three parts:
  1. Introduction
    - a) What type of program is it? How big? Where is it located? How many classes? How many children? Basic background on the program.
    - b) The intro should be 2/3 page to 1 page long
    - c) Make up fake names for the children; no last names required.
    - d) Introduce the children with their fake names, ages ( example: "James is 3 years, 10 months old...")



- e) How many children and how many adults in the room
- f) Program philosophy (play-based, Montessori, etc.)
- 2. Body of observation
  - a) First summarize the running record in paragraph form. (“The children did this, then they did that, then they did this...”)
  - b) Then compare and contrast in all domains of development (“James held long conversations with his peers, but Charlie could not form full sentences...”)
- 3. Reflection
  - a) What do you think? (factual, not our opinion)
  - b) According to child development textbook, a child this age should have these capabilities. Talk about “Child 1 had these capabilities; Child 2 had some but not others...”
- 4. Also always turn in your handwritten notes from the observation too.
- D. Looking at similarities & differences in:
  - 1. Activities
  - 2. Social / emotional
  - 3. Cognitive
  - 4. Physical
  - 5. Language

#### **IV. Individual Project (due near the end of the semester)**

- A. Leave the plan taped to your folder. Don't take it home yet. Read any notes she left for you.
- B. Better to make playdough with children than to use the junk from the toy store. (The brand name PlayDoh feels like plastic and smells nasty and doesn't mold well in the hand. Don't use that for your activity.)

- C. Make sure it's developmentally appropriate and will benefit all children.
- D. If working on colors, you need to pay close attention to the age of the children and different ways to approach it. You can't just put out red, blue, and yellow paint and tell the children the names of the colors and hope it sticks.

## V. Chapter 4: Normal & Exceptional Development

### A. What is typical development?

1. "Typical development" = the usual sequence of growth and development, determined by scientific research over time, where children usually have predictable capabilities at a particular age. "Atypical development" is anything outside of that, when we start to worry.
2. Not all children of the same age have exactly the same capabilities. "Typical" is a range influenced by many factors:
  - a) Maturity (naturally develops over time)
  - b) Problem-solving abilities/intelligence
  - c) Materials in the environment (opportunities to practice skills, move around safely, variety of play materials, etc.)
  - d) People in the environment (Do the parents talk to the child from birth? Are teachers engaging, interactive, affectionate, or just providing food and clean diapers? Are adults responsive to the child's needs? Do they pay attention to all areas of development, or are they busy talking on the phone all day? Interaction matters a lot!)

### B. What is atypical development?

1. Atypical development = any aspect of development (maybe one domain or multiple domains of development) that is outside the range of typical development. Means there is a special need involved, must be addressed.

C. What are the preventative measures we can take as we work with children at risk?

1. Who is at risk?

- a) Lower income families (lower parent education, emotional well-being/ stress level of family, poor nutrition from prenatal throughout life, unsafe/ insecure/ inconsistent home life, lack of medical care from prenatal throughout life)
- b) Mom who drank or did drugs during pregnancy
- c) Single parents (stressful, harder to provide, more likely to be in poverty) compared to two loving parents

2. What do we do after we identify these children who are at risk?

- a) Try to fill in the gaps. What can I do to support this child's development, knowing that their environment is not perfect?
- b) If one parent is absent, teachers can provide extra nurturing and work on trust and attachment.
- c) If the home life is abusive, report it to CPS to get the family help.
- d) Differentiate the care we provide when we know the child needs it more.

D. How do we become more successful in identifying children, including children who are gifted and underprivileged?

- 1. Careful, attentive, detailed observation is one of the most important parts of our job. We can't provide effective care to any child without observing.
- 2. Build a relationship. If you want to know what's going on with a child so you know how to help, you have to develop a relationship with the child and the family. They won't share anything until they trust you.
- 3. After that, talk to parents about getting an evaluation/ diagnosis so the services can start.

E. Key points

1. Typical and atypical development emerge from the same basic processes.
2. We have to know what is typical to be able to spot what is atypical.  
Observation and documentation are essential.
3. Definitions of “normal” and “exceptional” vary.
  - a) What is normal development? (biologically true across cultures)
  - b) Cultural norms vary
  - c) Individual differences matter
  - d) These three factors matter for each child. Two normal children are not exactly the same. Children “normally” walk between 8 and 16 months of age. That’s a wide range!
4. A child is a child, yet all children are unique.
5. ECE aims to improve a child’s development and to prevent or lessen developmental problems.
  - a) Gifted children often come from an environment that has supported that giftedness. They have been raised in a supportive, nurturing environment.
  - b) Individual / inborn abilities and capabilities matter a lot, but they usually only manifest fully if the environment supports it.
  - c) Example: toddlers in third-world countries often speak fluent sentences at two years old, far beyond our children. It’s not because they’re smarter; it’s because they’re always around adults and nurtured with language. Same with their hand-eye coordination.

#### F. Typical development

1. Is an ongoing process of growing, changing, and acquiring complex skills
2. “Normality” is in the eye of the beholder. Culture has a lot to do with this.
3. The ways a child with disabilities or special needs is like other children are often overlooked. (This is part of the point of our program observation

assignment. Look at what they have in common, not just the differences!  
They're children first.)

4. What is typical development?
  - a) "Normal" generally is what we expect most of the children of that age to be able to do. If you have a group of 4-year-olds and one stands out because he can't do a lot of the things the others can, it may be a case of atypical development.
  - b) Definitions vary among professionals
    - (1) some stick strictly to checklists and age milestones
    - (2) others put more emphasis on environment: a child who lives in front of TV will not have as much language as a child in a rich, interactive environment
  - c) Culturally defined differences
    - (1) Example: Japanese culture speaks softly, doesn't talk as much. Chinese is louder. German talks much more. The tone of voice and how much they speak will be different depending on culture.
  - d) Individual differences
  - e) Variations and differences among children (no two 3-year-olds are identical)
  - f) Developmental sequences (step by step toward mastery) are predictable
    - (1) Cannot expect a six-month-old to get up and walk without crawling, sitting, rolling over, etc. before
    - (2) Our expectations should be based on our knowledge of child development
  - g) Developmental milestones are behavior or skill sequences
    - (1) Whether the steps come faster or slower (individual differences), they usually come in the same order.

(2) Sometimes kids skip a step (such as walking without crawling first) but usually not.

h) Textbook has explanations of the milestones/timelines of each age: infancy, toddlerhood, preschool, school age years.

(1) “Terrible twos” can be terrible for parents, not kids. It’s a time when kids start asserting their autonomy.

(2) Preschoolers have more imagination, interactive play, problem-solving, self-help skills, larger vocabulary.

(3) Kids learn to read up to 3rd grade. After that, they read to learn, so we have only until 3rd grade to teach them to love reading and do it fluently.

(4) We have most of our base knowledge for life by 5th grade. After that, it’s adding detail and connections.

#### G. Developmental principles: infants who are at risk or disabled

1. The infant is:

a) a competent organism (has some capabilities, constantly developing more)

b) a social organism (likes human interaction, wants you to talk to them and smile at them)

c) an active organism (move and kick before they’re even born!)

d) Development proceeds from undifferentiated (general) to differentiated (specific) abilities. Example: young infant flails arms and legs all over, but later learns to control one limb at a time to accomplish something. Goes from reflexes to intentional movement.

e) Development is an interactive process: nature (biology / genes / maturity over time) + nurture (environment, including people and experiences)

#### H. Exceptional / atypical development

1. Focuses on established risk, environmental risks, biological risks



2. Genetic, chromosomal abnormalities, prenatal complications, teratogens (toxins during pregnancy), complications at birth (can still happen today, even with all our modern medicine at good hospitals)
  3. Includes the mildest conditions, up to brilliant (but different) children, includes at-risk up to severe disabilities and gifted (can be a little different or can be vastly different, some disabilities are hard to detect but others are very obvious)
  4. Classification is an issue, but has its value
    - a) Not all children with the same diagnosis are at the same level or have the same struggles
    - b) Labeling a child can change how we perceive them and what we expect of them (bad)
    - c) Helpful to have an accurate diagnosis so we know what services they need and how best to serve them (good)
- I. Terminology and appropriate language
1. Demeaning terminology of the past (“handicapped child”)
  2. People-first language ( the new way)
    - a) Focus on the whole child
    - b) All children are children first
    - c) Practice should reflect approach (Change how I look at these kids, how I feel about it, build my classroom and curriculum and attitudes for children first, and then accommodate the disabilities. Don’t just see the wheelchair. Get to know the child first. It’s not just terminology, it’s a whole shift in mindset: children first!)
    - d) Refer to children with disabilities or who have special needs
    - e) Promotes the concept that young children with atypical characteristics resemble normally developing children

- f) Emphasizes that atypically developing children resemble typically developing children more than they differ from them. (Majority of the time, there's one disability/ difference and lots of similarities.)
  - g) "Maria, who has spina bifida..."
  - h) "Jason is a child with autism..."
  - i) What's tricky about this? We're not used to it (we grew up with "special ed kids") and it takes longer (more words).
  - j) When someone asks, "What kind of special needs does he have?" it's a chance to respond with person-first language. "Andrew is a child with Down Syndrome. He can do this and this, but needs help with that..."
3. Developmental Delay
- a) is when a child performs like a typically developing child of a much younger age (example: a three-year-old who talks like an 18-month-old)
  - b) the milestones are coming, but at a much slower pace, well after the typical ages
4. Wolery, Strain & Bailey, 1992 said, "Children with disabilities are different because they need environments that are specifically adjusted to minimize the effects of their disabilities and to promote learning of a broad range of skills."
- a) This is why the Montessori environment is so supportive for children with disabilities, because it is set up to be so individualized and sequential, involve movement, materials are designed to be attractive and instructive and develop the senses

#### J. Children at risk

- 1. Have the potential for healthy development
- 2. Risk factors can be biological or environmental
- 3. Some risk factors are:
  - a) Malnutrition

- b) Inadequate shelter (homeless, whether sleeping outside or in a shelter or living in motels or moving from one relative's house to another every few days, it's all inconsistent/insecure and not nurturing)
  - c) Poor health care
  - d) Poverty
4. Affects the child's social development throughout life when the other children in class say, "You stink" or "Your clothes are dirty" because they're homeless. Helps if we can offer to wash their clothes at school along with school laundry, assuming we have a good relationship with the family already. (Will be offensive if you offer this without an established relationship.)

## **VI. Chapter 5: Developmental Disabilities**

### **A. What are developmental disabilities?**

- 1. Disabilities or delays that are outside of typical development
- 2. Examples
  - a) Speech delay (a 2-year-old only using a few single words or no words)
  - b) Fine or gross motor delay (3-year-old can't jump or run or go up stairs)

### **B. What are the causes?**

- 1. Lack of exposure/nurturing environment (such as parents/caregivers who don't talk to children, so how will they learn language? Of course those children won't be able to talk by the typical age)
- 2. Physical issues, such as children with misshapen tongues or low muscle tone in their faces that can lead to speech delays
- 3. Can be genetic, biological, environmental, etc.

### **C. What do you do with a 4-year-old who only says "gagagaga" and "mamamama" and is diagnosed with a speech delay?**

1. Check the hearing first!! They won't be able to reproduce speech sounds they can't hear. Yes, infants are tested for hearing problems in the delivery room, but it can develop later too
  2. Make sure the parents are able to role model proper language.
  3. If the family uses "code words" (such as "ookie" for "cookie" or "momo" for juice), it doesn't mean it's a speech delay if the child doesn't have proper vocabulary. It's environmental. Counteract that by providing rich language with proper words.
- D. What is the correlation between poverty and developmental disabilities in young children?
1. Lack of health care and nutrition during pregnancy and after delivery
  2. Lack of rich, nurturing, engaging environment that involves the five senses
  3. Too much "screen time" as babysitters instead of high-quality care
- E. Key points about developmental disabilities
1. Damage that can occur at any stage of development (time of birth or detected later in life)
  2. Congenital (condition present at the time of birth) problems may or may not be genetically related, can also be due to exposure to toxins during pregnancy
  3. Recognized at birth or detected later
  4. Biology and environment act together (a child with a slight case of something who gets enough early intervention can eventually catch up; without support, even a slight disability can become a really big deal in life)
- F. Biological factors (all described in our textbook, plus more)
1. Chromosomal abnormalities
  2. Fragile X syndrome
  3. Abnormal gene disorders (both parents can be carriers of a recessive gene, but the child gets the disorder if they get two recessive genes)

#### 4. Metabolic disorders

### G. Down Syndrome

1. "Trisomy-21" means they have an extra 21st chromosome, 47 total chromosomes instead of 46
2. Physical appearance: small round head, flattened in the back, flat mid-face, small ears, short stature (especially short legs), short fingers, simian crease

### H. Abnormal gene disorders

1. Tay Sachs (problem with the nervous system)
2. Cystic fibrosis (too much mucus in the lungs prevents oxygen from flowing, hard to breathe, have to use suction from the mouth and thumping on the back to keep the airway clear)
3. Sickle-cell anemia (blood cells shaped like a crescent moon, genetic, most common in African-American population, very painful)
4. Duchene muscular dystrophy (sex-linked disorder mostly in males, different from other forms of muscular dystrophy, prevents muscles from working properly)

### I. Prenatal infections and intoxicants

1. Responsible for 25% of developmental problems
2. Rubella, diabetes, AIDS, herpes simplex, poor nutrition, chicken pox
  - a) Rubella can blind the unborn child
  - b) Used to have "chicken pox parties" before the vaccine to intentionally expose all the children so the girls wouldn't get it later as adults when they're pregnant
  - c) Diabetes can start during pregnancy or before (needs to be under a doctor's supervision either way)
  - d) If AIDS and herpes simplex, recommend mom has a C-section to minimize child's exposure during the birth process

### 3. Alcohol and drug abuse

- a) can do damage before you even know you're pregnant or go to the doctor.  
If you might get pregnant, just don't do drugs or drink at all.
- b) "Crack babies" who are born addicted have yellow skin, short attention span, muscle twitches, low appetite, hard to calm down, etc. Lots of issues throughout life.

### J. Birth complications and teratogens

#### 1. Anoxia (lack of oxygen)

#### 2. Premature infants

- a) used to give too much oxygen in incubators, the baby would go blind, now have better control of that with computers
- b) have to catch up developmentally with other children
- c) born underweight, can't regulate their own temperature or rhythms at first
- d) in the last month of pregnancy, the baby builds up weight and fat under the skin to help insulate them in the world. Premature = they didn't have time to build up that protection.

#### 3. Complications following birth (meningitis, encephalitis, lead poisoning, poor nutrition)

- a) Meningitis is a virus in the brain, causes swelling in the brain which causes brain damage and can be deadly
- b) Especially damaging when anything has to do with the brain

#### 4. Poverty

- a) Nutritional deficiency (WIC)
- b) Inadequate health care and education
  - (1) Example: Pregnant moms may not know how important it is to keep walking and exercising

- c) Homelessness and sub-standard housing
- d) Single-parent families
- e) Child care (majority of children are raised in child care now, so the quality of the care we provide directly affects their development)
- f) When our teacher first came to the US, there were no pan-handlers. The few people who were homeless were taken care of by churches. Today, there are people at every intersection asking for money. Poverty is getting worse.

K. Categorical disabilities

1. Specific learning disability
2. Speech and language
3. Autism
4. Mental retardation (very low IQ)
5. Emotional disorders, mental health problems (now being seen in children less than one year old! due to poor social-emotional development due to lack of affectionate interaction/ attachment/love)
6. Multiple disabilities (can make it harder to find ways to support their overall development)
7. Orthopedic impairments (gross motor, mobility, braces or special chairs or walkers, etc.)
8. Hearing loss (can be a little bit or totally deaf)
9. Visual impairment (can be a little bit or totally blind)

- L. When you are taking care of a child with special needs, try to experience it/ simulate it for yourself as much as possible. If the child is deaf, walk around your room with ear plugs. If you understand it better, you can provide better care.