

LITTLE PEOPLE AND BIG LESSONS:
STRATEGIES FOR VERY YOUNG CHILDREN
WHO ARE BLIND/VISUALLY IMPAIRED

Tanni L. Anthony, Ph.D.
British Columbia Vision Teachers Association
October 26, 2013

**Early Onset Blindness /
Visual Impairment**

What do we know? From the literature? From how we were trained? From our experience?

↓

What do we believe based on what we know? And what to we do because of what we know and believe?

↓

We need to continue to learn with open minds and open hearts ... our children count on us to do better, so they will do better.

Lesson #1

Beware of all the written word.

Remember to:

read

Our Research Literature Tells a Story

- ❖ Early researchers noted the profound impact of blindness upon the developing child.
- ❖ Further research and a cross-discipline understandings have elevated our knowledge about a unique developmental path for infants who are blind/visually impaired.
- ❖ Early intervention has brought a focus upon specific interventions to mitigate developmental concerns in the early years.



Whether or Not

- Early onset blindness is a *developmental emergency* or *simply a different way of learning*,

.... there are tenets and even truths we can all learn and share to welcome the child first and then address the needs of the child with visual impairment, including blindness.

Lesson #2:


Does Size REALLY Matter?

Very Young Children Are Not Just Small Adults



Very Young Children Are Not Just Smaller School Age Children

- Infancy is a time of constant change.
- Infancy is a unique period of its own. So are the preschool years.
- Early first learning is based on senses / actions (observing, touching, doing).
- By preschool, the child is gaining memory and problem solving based on personal experience with increasing motor skills and play opportunities.



Getting Focused on our Role



- Supporting learning.
 - creating learning environments
 - providing opportunities for learning
- Recognizing individual differences and experience.
- Guiding / mediating experiences .

Lesson #3:

We Must Begin with an Important End in Mind

End Goal: A Happy Childhood



Lesson #4

**Know the Ages and Stages
AKA Development**



NAEYC
The nation's leading voice for high-quality early childhood education for children from birth through age 8

Developmentally Appropriate Practice in Early Childhood Programs Serving Children from Birth through Age 8

A Position Statement from the National Association for the Education of Young Children

(A Framework for Developmentally Appropriate Best Practice)

Adopted 2009

<http://www.naeyc.org/>

Knowledge Needed for Decision Making

- 1. Child Development and Age-Related Learning Characteristics**
 - ◆ We need to understand both typical development and the literature of the development of young children with early onset blindness/visual impairment
 - ◆ It is not enough to know typical development and it is not enough to know "blindness" – both components are needed to build an appropriate intervention for the child and supports for the family.

◆ Are you ready for a little test!?

A Preschool Quiz

- 1. By age 3, most children can:**
 - Draw a person with two to four body parts
 - Draw a circle
 - Print some letters
 - All of the above

http://www.riversideonline.com/health_reference/Childrens-Health/QZ00075.cfm

A Preschool Quiz

- 2. Most 2-year-old children understand the concept of "two."**
 - True
 - False

A Preschool Quiz

- 3. Most 3-year olds can correctly name at least four colors.**
 - True
 - False

A Preschool Quiz

- 4. At what age can most children use stairs without support?**
 - 2 years
 - 3 years
 - 4 years
 - 5 years

A Preschool Quiz

5. Make believe does not begin until age three.
- True
 - False

A Preschool Quiz

6. On average, how long does it take to potty train a child?
- One month
 - Three months
 - Six months
 - A year

A Preschool Quiz

7. By age of three, most children can speak in sentences containing:
- Two to four words
 - Five to six words
 - Seven to eight words
 - Only one-word demands

A Preschool Quiz

8. Four year old children can:
- Kick a ball
 - Throw a ball overhand
 - Catch a bounced ball most of the time
 - All of the above

A Preschool Perspective

- Change slows down from the infant/toddler years, but is still considerable.
- A child may grow as much as six inches from three to five years. On average, gain 5-6 pounds per year.
- Develop a “less-toddler” trunk. Growth occurs mostly in trunk and legs. The child is better prepared to take on gravity.
- Range of behaviors – sometimes younger, sometimes older. Challenge to maintain appropriate expectations.

Physical Growth/Change: 3- 5 Years

- Brain grows from 75 to 90% of its adult size
- Lateralization of brain (hemispheres develop separate functions and interconnections)
- Senses are typically well developed.

Quiz Answers - Cognitive

Most children can draw a circle by the age of 3. By the age of 4, children typically can draw a person with two to four body parts. They may also be able to print some capital letters. (#1) – *answer – draw a circle*

Understanding the concept of "two" usually doesn't occur until age 3. By the age of 4, most children understand the concept of counting and may know a few numbers. Five-year-olds usually can count at least 10 objects. (#2) *answer – false*

While 3-year-olds can sort objects by color, most children can't correctly name four colors until they are 5. (#3) = *answer - false*

Quiz Answers - Gross Motor Development

The average 4-year-old child can walk up and down stairs without support. Children typically can use stairs, with support, by the age of 2. They may feel most comfortable taking "half-steps." (#4) – *answer - age 4*

Children typically begin kicking balls when they are 2. They graduate to throwing a ball overhand and catching bounced balls by age 4. (# 8) - *answer all of the above*

Quiz Answers - Social

Make-believe play usually begins by the age of 2. Three-year-old children typically include dolls, animals and people in their make-believe play. (#5) *answer – false*

The child shows an increase in ability to turn take, show cooperative play (by 4), and dramatic play (by 5) with other children.

Quiz Answers - Self Help

Most children complete potty training within three months.

If a child is taking longer, the most probable cause for the delay is that he or she child isn't mature enough to learn this skill yet.

(#6) Answer – 3 months

Quiz Answers - Language

Vocabulary increases steadily.

3 years: 2,000 to 4,000 words

4 years: 4,000 to 6,000

5 years: 5,000 – 8,000 words

At 3, most children can speak in five-word sentences, using pronouns (I, you, me, we and they) and some plurals. (#7) *answer – 5 to 6 words in a sentence*

Preschoolers

Are NOT

School age children.

- ❖ Emotionally
- ❖ Behaviorally
- ❖ Motorically (fine / gross motor, balance)
- ❖ Academically (ugh)

Project PRISM

- <http://www.unco.edu/ncssd/research/PRISM/>
- 159/202 participants
- 19.1 months in study
- Mean age of ID was 3.3 months
- 59.9% had additional disabilities

What is the Same? What is Different?

- ◆ For the most part, the developmental priorities are the same
- exceptions: health needs, access needs
- ◆ For the most part, the sequence is the same.
- exceptions: reaching, eating, crawling, and talking
- ◆ For the most part, the rate can be the same (with variability)
(earlier – language and communication
(later – independent walking and dressing)
- ◆ Other considerations: time it takes to gear up listening and touch; quality factors, presence of additional disabilities

Lesson #5

When is a Variable a Game Changer?

Knowledge Needed for Decision Making

2. Child as an Individual

- ◆ **Individual Differences** (special thanks to David Warren)
- ◆ Impact of internal and external variables Upon EACH child's development
- ◆ How best to adapt and be responsive to the individual child.
- ◆ This is a good part of the REST of the story.

Let Me Count Just Some of the Ways

- ◆ Children vary in:
 - ◆ temperament
 - ◆ personality
 - ◆ birth order (and gender therein)
 - ◆ interests /preferences
 - ◆ aptitudes (strengths and needs)
 - ◆ family situation / culture

Lesson #6:

**There is the physical person
born to the planet.**

**There is the real person
created on the planet.**
(what we do matters)

Temperament Traits

Activity level – always active or generally still

Biological Rhythms – predictability of hunger, sleep, elimination

Approach/Withdrawal – response to new situations

Mood – tendency to react with positive or negative mood, serious, fussy

Intensity of Reaction – energy or strength of emotional reaction

Sensitivity – comfort levels of sensory info; sound, light, feel of clothing, new tastes

Adaptability – ease of managing transitions or changes

Distractibility – how easily a child’s attention is pulled from an activity

Persistence – how long child continues with an activity he/she finds difficult

Temperament Types Flexible, Fearful, and Feisty



Temperament Types

Flexible – 40%	Fearful - 15%	Feisty – 10%
Regular rhythms		Irregular
Positive mood	Withdraws	Moody
Adaptability	Adapts Slowly	Distractible
Low intensity		Intense
Low sensitivity		Sensitive
		Active

Flexible – about 40 percent of kids

- Regular Rhythms
- Positive Mood
- Quick to Adapts
- Low Intensity
- Low Sensitivity

Need special attention so they do not get lost in the group. May not be as obvious with needs. Want to “check in” with this child, as he or she may not be overly overt with needs.

Fearful – roughly 15% of kids

- Slow to adapt.
- Withdraws

May be called shy. If pushed to join in, may cause withdrawal. Helpful to provide preparation for new activities. Watch for emotion to shift from caution to enjoyment before stepping back. Provide a space of the child’s own.

Feisty or Fussing – 10% of kids

<input type="checkbox"/> Active	<input type="checkbox"/> Intense	<input type="checkbox"/> Distractible
<input type="checkbox"/> Sensitive	<input type="checkbox"/> Irregular	<input type="checkbox"/> Moody

- Children are intense – fun and frustrating.
- Can use redirection of attention.
- Helpful to be flexible and adapt to the child who defies a schedule.
- Be sensitive to child’s response to sensory information (touch, light, noise). Peaceful settings and preparation with transitions are important.

Sensory Assessment

- Clinical Assessment
- Sensory Channel Form
- Individual Sensory Learning Profile
- Likes and Dislikes / Sensory Preference Probes
- Functional Vision / Learning Media Assessment

Likes and Dislikes

Likes	Dislikes
	People
	Objects
	Places
	Clothing
	Sounds / Music
	Touch Styles / Movement
	Vibration / Rhythm / Resonance
	Colors / Lights / Reflection
	Scents / Tastes

(Kathe Scoggins)

Questions to Answer:

- What does the child see?
- What does the child hear?
- What are his / her proprioceptive needs?
- What are his / her vestibular needs?
- **What are the child's sensory preferences / dislikes?**
- What about positioning for optimal learning?
- Do any medicines affect sensory functioning?

- Does everyone on the team KNOW this information?

Piano Man (Boy)

- Photo of child playing piano (removed to protect privacy)

Be a Dancer (with a cute partner)

- Photo of two preschoolers dressed up and at a preschool dance (removed to protect privacy)

Be a Rock Climber

- Photo of child in a harness climbing a step walk (removed to protect privacy)

Lesson #7


Equal Access is the Name of the Game

APPLIED Sensory Assessment Results

A Book for You and About Me!

My name is Sara Miller.
I am five years old. Photo of child

I live with my parents, Jane and Phil. Photo of parents

I have a dog named Biscuit and he loves playing ball. 

An Early Start – But I Made It!

 I was born early – a 24 weeker.

I was in the hospital for over five months and had eight surgeries.

My parents are a little over protective because of this early experience – but they are working on it! Independence is a major goal at our house!

Thank you for expecting me to do what all the kids in my preschool program are doing.

About My Vision

Photo of
A young
Child with
albinism

I have albinism. My eyes do not have as much pigment as other people’s eyes. As a result I have low vision.

I see things best when they are close and not in overly bright lighting. I wear glasses throughout the day.

I sometimes use a magnifier to help me see. I like good contrast between what I am looking at and its background.

Information about Sensory Tools



This is a handheld magnifier. I use it to enlarge a picture or words. It will take me longer to see the whole picture or sentence, but I can do it!

Getting the Job Done!

- Photo of child with long cane
- Photo of child with adapted mobility device
- Photo of a child using a form tray
- Photo of child with braille writer
- Photo of child reading braille

Knowledge Needed for Decision Making

3. Social and cultural contexts in which children live.

- ◆ Values, expectations, and behavioral and linguistic conventions that shape children’s lives at home and in their communities.
- ◆ Family priorities, customs, and child-rearing practices (what gets added when a child has an early onset disability?)

Lesson #8

**Kids Come with Parents
(this is a good thing)**

One Example: 30 Million Word Gap

Hart and Risley study

- 2.5 years - observing 42 families – 1 hour/month
- children ages 7-9 months Until 3 years
- -13 Upper SES, 10 Middle, 13 Lower, 6 Welfare
1,318 observations in total
- Smaller vocab, slower adding words – tied to lower SES
- 6:1 encouragements / discouragements = higher SES
- 1:2 encouragements / discouragements = lower SES
- Vocabulary use at age 3 was predictive of measures of language skill at nine years

Results: Poverty Hurts Vocabulary

By 3 years

86-98% words in child’s vocabulary were words in parents’ vocabulary. Average number of words children heard per hour ranged from 616 to 2,153.

By four years of age:

45 million word exposure – higher SES
26 million word exposure – middle SES
13 million word exposure – lower SES

Children in the lower SES group were exposed to over 3 Million fewer words (not the same words, but just words in general). Extrapolated out, by 4 years of age children heard 13 M to 45 M words – thus a 30M word gap

Research SAYS!

- # and variety of words heard in home influences size and variety of child vocabularies (Hart and Risley, 1985)
- Frequency of listening to stories between ages one and three correlated with ratings of language at five years (Wells, 1985)
- Fewer book experiences, greater chance for reading problems (Snow et al, 1998)
- The words that beginning readers are learning to read must already exist in their oral vocabulary

Lesson #9

**Drivers Learn the Route Faster Than Passengers
DOING Matters
And
Practice Does Really Link to Perfect**

Good teachers acknowledge and encourage children’s efforts, model and demonstrate, create challenges and support children in extending their capabilities, and provide specific directions or instruction. All of these teaching strategies can be used in the context of play and structured activities.

Effective teachers also organize the classroom environment and plan ways to pursue educational goals for each child as opportunities arise in *child-initiated* activities and in activities planned and initiated by the teacher.

Self Initiation

“One way to describe the essence of active movement is when children are free to move when and where they want. This can be done when children monitor their own movement. Monitoring their own movement occurs when children decide when and where to move and when to start and stop their own movement.

When the purposeful thought for movement comes from the child, this is one way to describe “active movement and when we do the movement for children by manipulating their bodies, this is one way to describe passive movement.

Self Initiation

Blind children are vulnerable to experience more than their share of passive. For example when blind children are manipulated manually by adults, what they experience is passive movement and not their own active movement. This is not the way to learn about the world.”

Joe Cutter, 2007 p. 19

Lesson #10

**When we work together, expect good things,
provide accessible learning opportunities ...
good things happen.**

**Kids have fun. Kids learn.
Kids become independent.
Kids Can Take Flight and Fly!**

- Photos of children planting flowers
- Digging in dirt
- Using hose to water flowers

- Photo of child with hands on a cello
- Photo of three children with canes and holding a shared umbrella in the rain
- Last two slides – child with butterfly wings on large foam block – then spreading his wings as he jumps off to fly