Orientation, Mobility, Mediated Learning, and the Link to Early Literacy

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Orientation and Mobility is about the Solution

Orientation:
- "the ability to use one's remaining senses to understand one's location in the environment at any given time."

Mobility:
- "the capacity or faculty of movement."

Orientation and Mobility:
- "the teaching of the concepts, skills, and techniques necessary for a person with a visual impairment to travel safely, efficiently, and gracefully through any environment under all environmental conditions and situations."

William Jacobson (1993)

COMS
- Certified Orientation and Mobility Specialist
- Academy for Certification of Vision Rehabilitation Professionals (ACVREP)
- University training
- Guided Learning methods and principles
Visual Impairment

- Lacking visual perception due to physiological or neurological factors.
- Legal blindness: visual acuity of 20/200 (6/60) or less in the better eye with best correction possible
- Visual field of less than 20 degrees classified as being legally blind.
- Low vision is sometimes used to describe visual acuities from 20/70 to 20/200
- In 1994-1995, 1.3 million Americans reported legal blindness.

Incidence

In 1994-1995, 1.3 million Americans reported legal blindness.

Visual Impairment

- Definition
  The definition of vision impairment by the Centers for Disease Control and Prevention (CDC) says a visually impaired person's eyesight cannot be corrected to a “normal level”
  - Educational Definition
    Visual Impairment including blindness means an impairment in vision that, even with correction, adversely affects a child's educational performance. The term includes both partial sight and blindness. (IDEA 2004)
  - FYI
    In the United States, one out of 20 preschooler aged children will have a vision problem that affects their ability to learn (Prevent Blindness America, 2010).

Etiologies of Blindness

- Cataracts
- CVI
- Cortical Visual Impairment
- Glaucoma
- Infections
- Malformations – such as clefs
- Strabismus
- Nystagmus
- Ocular trauma
- Optic Nerve Defects (ONH, SOD, ONA)
- Retinoblastoma
- ROP
**Expanded Core Curriculum**
- compensatory skills
- orientation and mobility
- social interaction skills
- independent living skills
- recreation and leisure skills
- career education
- use of assistive technology
- sensory efficiency skills
- self-determination

**Expanded Core Curriculum (ECC)**
- Food prep
- Cooking
- Fishing
- Bicycling
- Changing a tire
- Shoveling snow
- Driving a car
- Crafts
- Shopping
- Dining out
- Water sports
- Gardening
- Growing things
- Housekeeping
- Raking leaves
- Making
- Purchasing

**Comprehensive O & M Plan**
- Assessment
- Spatial concepts
- Motor development
- Sensory training
- Familiarity
- Self-defense
- Low vision
- Mobility
Comprehensive O & M Plan
- Problem solving
- Mapping
- Long Cane Instruction
- GPS
- Dog Guide Consultation
- Expanded Core Curriculum (ECC)
- Public Transportation
- Advocacy

O & M in Early Childhood
Specific Skills Addressed in Early Childhood:
- Purposeful movements
- Body part/function awareness
- Directional/Positional Concepts
  - On/off, top/bottom, over/under, left/right, etc.
- Environmental concepts
  - Street, sidewalk, cars, trees, lawn, etc.
- Beginning cane techniques
- Beginning use of landmarks and clues for orientation
- Visual efficiency skills

Interior Dynamics
- Orientation
- Familiarization
- Trailing
- Doors
- Stairs
- Lunchroom
- Gym
- In-service class/staff
- ADL
- Social
- Eating
- Protocols
- Emergency
- Recess
- Playground
- Lunch
- Dismissal
- Bus
Exterior Dynamics

- Exposure results in consistency of expectations and generalizations
- Functions of how things work
- Gestalt of the position in space
  - Problem solving skills
  - Knowledge of surroundings
  - Environmental Literacy
- Signs, types of buildings, doors, posters, layout, streets, paths, landscape, terrain, properties
- Development of a relationship between the child and the environment

Learning Models

- Direct Exposure to Stimuli
- Mediated Learning Experience

Direct Exposure to Stimuli

- The process is through the senses:
  - Random-limited to the here and now
  - Goal-learning the content of the stimulus
  - Focus-on the content and the outcome
  - Limitations-attention span, number of times the stimulus appears, cognitive or environmental interference, previous experience
Mediated Learning Experience

**Stimuli**
- Input phase
  - Exposure to stimuli chosen according to the goal and the mediator’s intention: When, Where, How often, In which order.
  - Not Random
  - Refers to new experience and relates earlier and future events
  - Explains/clarifies the stimuli’s meaning

**Human Mediator**
- Elaboration phase

**Child**

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**Mediation**

**Input phase**
- Focuses the child’s attention
- Regulates child’s behavior to avoid impulsive behavior or over stimulation

**Output phase**
- Provides feedback, discusses generality of applications, enhances child’s feeling of competence

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**Goals of Mediation**

1. Intentionality and reciprocity
   - Intentionality: The mediator selects and defines the stimuli.
   - Reciprocity: The mediator and child see each other at the same level and are attentive to each other.

2. Transcendence
   - Learning of principles.
   - Transference of principles - environment, situation, subject, and time.
Goals of Mediation

- 3. Mediation of Meaning
  - Addresses the "Why" and "What" and "How" questions
  - Meaning of stimuli and related interactions beyond the obvious.

- 4. Mediation of the Feeling of Competence
  - Focus on the feeling of competence that enables the child to address new situations.
  - The mediator selects situations that ensure successful outcomes.
A Trip to the Post Office

Waiting for my turn...

Where does the stamp go?
How do I mail it?

Behind the Sneeze Guard
**Literacy**

“One of the best predictors of whether a child will function competently in school and go on to contribute actively in our increasingly literate society is the level to which the child progresses in reading and writing”

– A joint statement by NAEYC and IRA (1998)

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**Essential Experience to Undergird the Early Development of Literacy**

Alan Koenig and Carol Farrenkopf

- Early experience is an essential foundation for literacy development.
- Literacy events are meaningful when children have had the experiences portrayed in stories.
- Incidental learning takes place through experiences resulting in conceptual development.
- Goal of literacy to gain meaning through reading or to convey meaning through writing
- Key is the relation of what has been read to what has been experienced.

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**The Research**

- Three basal literacy series were analyzed
  - Each contained “big books”, student books, and books to be read aloud by the teacher.
  - Focus on First, Second, and Third grade
- Each story was analyzed to identify:
  - Main experiences needed for understanding;
  - Supporting experiences within the main experiences;
  - Specific concepts and vocabulary associated with the story.
The Results

- Global Experiences (N=254)
  - Daily activities
    - Doing or making things (17%)
    - Experiences with friends and pretending (19%)
    - Working together, sharing, helping (10%)
  - Dependent on instruction
    - Learning and content areas (1.6%)
    - Specific concepts (1.1%)

Bus Trip and Crown Center Skating

Doing Lunch Together
Playing Together

Making Doughnuts

Cooperative Learning
Traveling Together

The Results
- Supporting Experiences (2698 in 254 stories)
  - Daily Activities
    - Exploring nature, plants, and insects (8%)
    - Experiences with living creatures (7.8%)
  - Experiencing emotions/a sense of well-being (7.8%)
  - Experiences with family and family traditions (6%)
    - Experiences in the community (5.6%)
    - Experiences at home (4.9%)
  - Dependent on instruction
    - Understanding specific concepts (33.8%)
    - Learning and content areas (5%)

Experience with Living Creatures
Experiencing the World

Doing

Hands-on Experiences
Eating on my Own

The Implications
- Focus on experiences that are a common part of children's lives.
- Active learning with a hands-on approach.
- Allow time to complete tasks.
- Guide and Show...don't tell or intercede too fast.
- Allow time for exploration.
- Involve children in sequential activities.
- Use activities as a base for expanding vocabulary.

Putting It In Play
- Teachers
- Parents
- Siblings
- Significant people
- Relatives
- Friends
- Volunteers
- All of us...
Sources


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