2017 Texas Symposium on DeafBlindness
The Role of Tactile Reciprocal Interactions in the Cognitive Development of Children with DeafBlindness
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Presented by
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PowerPoint Content

The role of tactile reciprocal interactions in the cognitive development of children with DeafBlindness

Development
Human beings change over the course of their life, from the very beginning on.
You bring something into the world yourself
+
You are influenced in interactions with others in social context of where you are and over time

Early development of children
The focus of this process is
• not necessarily on a given set of stages along which the individual child moves (or not) from one skill to the next,
• rather, on the social influences and environments that impact the development of the child

Way and areas of development
• Development happens through hands-on experiences and social interaction with members of the culture the child lives in
• In shared experiences, the child learns from and with others, including exploration of the world.
• Areas of development are sensory, motor, social, emotional, cognitive, communication, language.
• These developmental areas are all connected.

Early cognitive development
• Emerging mental processes to understand and interact with the world
  (Hall Lueck, Chen, Kekelis & Hartman, 2008)
• These mental processes build representations, ideas or concepts about one self, others and the surrounding world.
• Building these mental representations or concepts involves other people, perception, action and memory
• Discovering and learning about the world is exciting!
Some early cognitive/mental understandings

- Discrimination between properties - recognition - idea of self - you and me - she understands me - patterns - object permanence - near space and far space in relation to one self (proximity-distance) - cause and effect - actions with people or things - retain and recall experiences - imitation (familiar or unfamiliar) - joint attention - properties and workings of people, animals, the natural world and things - generalization across contexts - categories/classification - spatial locations - positions of objects in space - symbolic representations - relation between objects - function and use of objects - order of actions and objects (routine) - temporal: now, past and future - main idea of an event (flexible)

- Some mental understandings precede others.
- Concepts develop continuously and build with, across and upon each.

Concepts and language

- Initial experiential expressions
- Language reflecting experiential concepts in that particular situation
- Language reflecting the blending of the initial concepts into generalized concepts

Perception

- Vision loss
- Hearing loss
- DeafBlindness

Devices

Are set backs or delays in cognitive development due to the sensory impairment a given?
No.

Tactile cognition

- Starting point:
  - The child may have concepts based on tactile experience that (hearing)-(sighted) people do not know or recognize.
  - The educator may have concepts based on visual-auditory experiences which the child cannot access.
- Tactile processing and memory in the brain
- Shared experiences in everyday situations lead to building shared concepts and developing generalized concepts
Social cognition

- Reciprocal Interactions
  - Patterns
  - Characteristics (Van den Tillaart, 2001)
- Building social concepts

Attachment:

- Social trust, emotional balance and positive idea of self:
- Exploration: discovering the world is exciting!
- Discovering the world together is exciting!
  - Access
  - Modeling
  - Active learning

Concepts and DeafBlindness

- Awareness about the difference between concepts and skills
- Implications for the child with DeafBlindness:
  - Meaningful and relevant
  - Experiential and incidental
  - Misunderstandings about concrete and abstract concepts

(Monaco and Mamer, 1999)

How do you know if the child developed a mental concept

- You recognize the meaning of the child’s social and independent initiatives
  - Orientation reflex and habituation
  - Eye gaze - hand touch and movement
  - Expressions from previously shared experiences
  - Initiatives and responses in interactions with peers and others
  - Initiatives and responses in other contexts, places and time than the first experience
Communication - Language

- Experience books, including objects
- From mutual attention to joint attention
- Objects and nouns?
  - People and pronouns
  - Movements and verbs
  - Properties and adjectives
  - Past/Future and time words
  - Places and adverbs

Other supporting strategies and activities

- Small variations to the expectations: objects, movements, properties, etc.
- Generalization of concepts across activities
- Announcements, planning, looking back (time indicators, calendars)
- Orientation and Mobility
- Technical devices
- From the shared experience within the context to explicit practice outside the context

Assessment, IEP and Standards

- Diagnostic teaching – building upon existing and shared concepts
- Requirements within school systems:
  - Grade/Curriculum based standards
  - IEP Goals

Cognitive development through social interaction in a sensory diverse world

- Cognitive development should not be limited or held back by a sensory impairment.
- We should believe in the richness of a sensory world different from what most people perceive.
- It is our task to meet the child in her tactile world, and her individually perceived visual/auditory world if applicable, through reciprocal interactions in everyday situations.
- Only then can the child develop her cognition, concepts and ideas as she interacts with the world.
- And only then, if needed, can we discover and say anything meaningful about suspected additional disabilities and their possible impact on the cognitive development of the child with congenital DeafBlindness.
References


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Figure 1 TSBVI logo.

Figure 2 IDEAs that Work logo and OSEP disclaimer.

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