Using a tactile picture book for sensory education (development of exploration strategies)

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“From a variety of observational and experimental evidence, it is clear that haptic perception improves substantially during the early childhood years. Part of the improvement may be a result of increasing haptic discrimination, but evidence suggests that improvement in haptic exploration strategies is the key to development“ (Warren; 1982, S. 115).
"touch strategy" (tactual Profile), "tactile exploration strategy" (Warren), "exploration procedures (EP)" (Lederman/Klatzky)

"the way in which a child approaches a tactile task" (Tactual Profile, S. 162)

Properties of an object

- Texture
- hardness, elasticity, material
- temperature
- weight
- size
- length

form
function
spacial organisation
plan
Texture

- 0 – 6 /8 months: rough discrimination of texture through pressing
- 8 months: first lateral movements
- 1 months: lateral movements with the finger tips
- Using different parts of the body (like feet and several finger tips, tongue, fingernails) to recognise textures (fine differences)
- Attention focused on sounds during exploration (sticky, rough)
Hardness, elasticity, material

- 3rd – 4th month: inappropriate strategy of enclosing the object
- 3rd /4th month: one hand stabilises the object while the other hand squeezes it
- 6th month: strategy to explore elasticity: squeezing and pulling at the object
- Strategy to explore material: tapping on the object to get auditive information
- Strategy to explore inner structure: pressure
• Enclosing the object using both hands
Weight

- 3rd – 4th month: unsupported holding
- 9th month: recognise weight differences
- putting the object from one hand into the other
- shaking an object slightly
- rattling an object while it changes hands
- 4 - 6 years: recognising differences in weight by comparing two objects while holding one in each hand
Size

- enclosing small objects with one hand
- encompassing with the fingers of one hand or two hands
- embracing the object with arms
- 6 - 9 years: stapling objects to recognise differences
- Using measurement techniques
- Scanning upto the edges
Length

- Holding the object between thumb and other fingers and then move the fingers to identify the thickness of an object
- 2/4 years: scanning alongside the edge
- 5 years: holding the object at its ends
- 7/8 years: encompassing the object with thumb and pointer and scan from the ends to the middle
- Comparing length by using bodyparts
- Comparison: laying two objects next to each other/encompassing one object in each hand at the same time
- 9/12 years: using external points of reference
Form

- enclosing an object (different sides)
- recognising contours
- 18 months: rotating an object
- comparing different parts of the object with each other
- marking a starting point for detailed search
- watching out for interesting and expectable characteristics
- sweeping along the form
- gaining an overview and than detailed search
- Interrelating the object with own body position
- counting salient properties (corners)
- measuring different parts of the form
- hypothesising
Function

- part motion: removing a part
- identifying the specific function of an object
Spacial organisation

- 6 – 9 years: scanning a surface systematically from top to bottom and from left to right (different scanning technics) and watching out for salient properties (overview)
- 4 /6 years: using one hand as a point of reference
- following a line
- comparing several lines by sweeping with one hand over the lines
- counting (moving objects from one place to another/marking counted objects with fingers,/isolating counted objects with one hand)
- 6/9 years: sorting (aligning/placing objects in prepared boxes/comparing objects tactile)
Planning

- planning tactile exploration
- reflecting exploration strategies
- controlling tactile exploration
Picture books

- Kids love picture books
- Reread a book several times
- Criterias of tactile picture books
- Interesting story gives a reason to use those strategies
- a lot of activities to keep the children busy with exploring and using specific strategies
Willi wants it wonderfully beautiful!!!

- Braille text
- Important role of the storyteller
- Different ways of exploration
- Different textures and colours
Willi will es wunderschön!
Willi’s appartment
Pasture with flowers and molehill
Willi with pieces of wood
Willi at the river
Wall with holes
Willi in the stable
Danger!!!
Field of stones
Way home
Hungry Willi!!
Sweet new home!!!
results

- Which strategy?
- Story – strategies -> balance
- Sometimes to complex (guidance is required)
- Motivation?
- One sentence is repeated on every page
- child should talk about what it does and senses
- Different levels
Questions?! 

Thank you for listening!!!!