

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



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Inspiration



*„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).*

Definitions



- **„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

temperatur

weight

size

lenght

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

Temperature



- 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 then 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

cover



Willi's apartment



Willi will es wunderschön!
Das ist Willi der Maulwurf.
Willi hat diese Nacht sehr
schlecht geschlafen. „Aua, aua!“,
schreit er am Morgen, „So viele
spitze Steine!“ Willi mag seine
Wohnung gar nicht! Doch da kommt
ihm eine Idee! Heute wird
aufgeräumt. Und schwupps kommen
alle Steine in den Beutel!



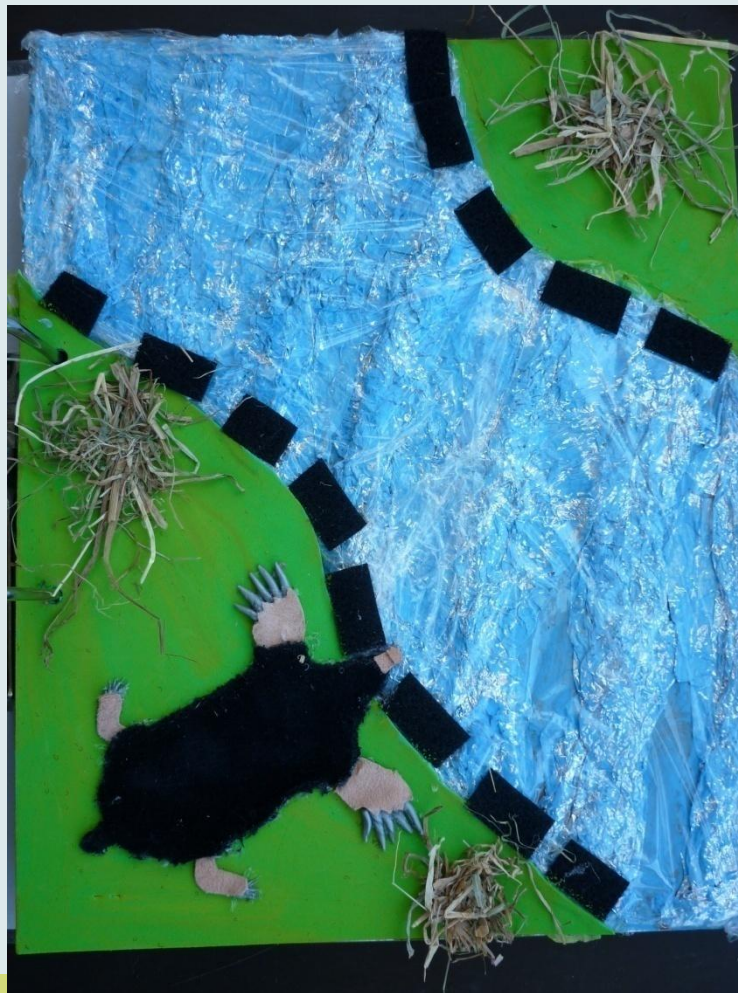
Pasture with flowers and molehill



Willi with pieces of wood



Willi at the river



Wall with holes



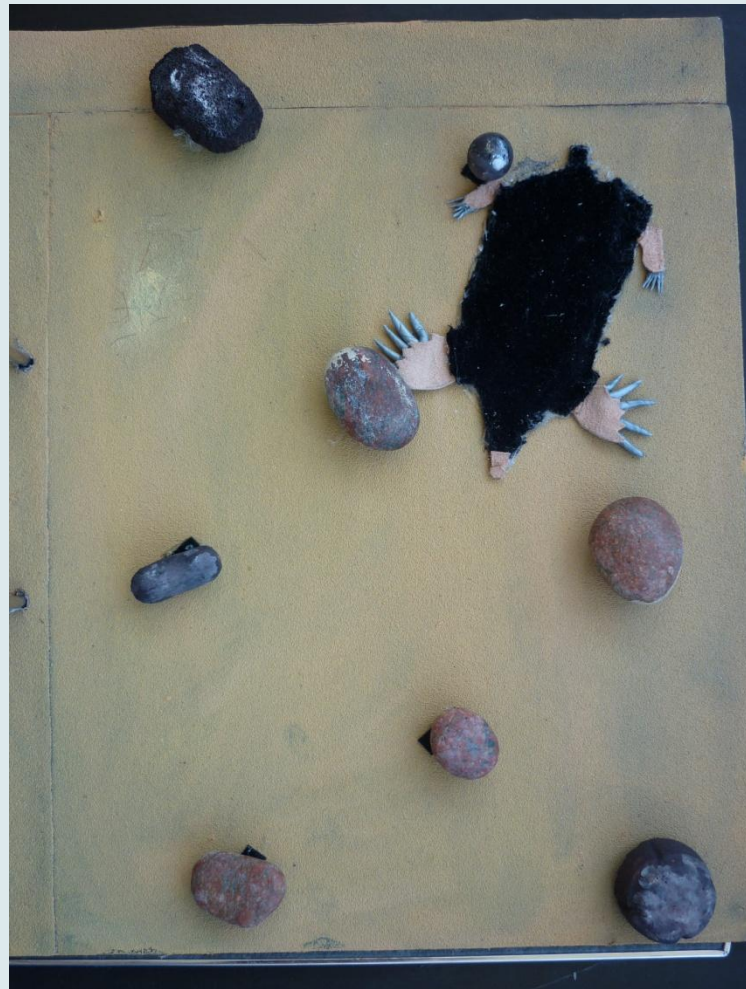
Willi in the stable



Danger!!!



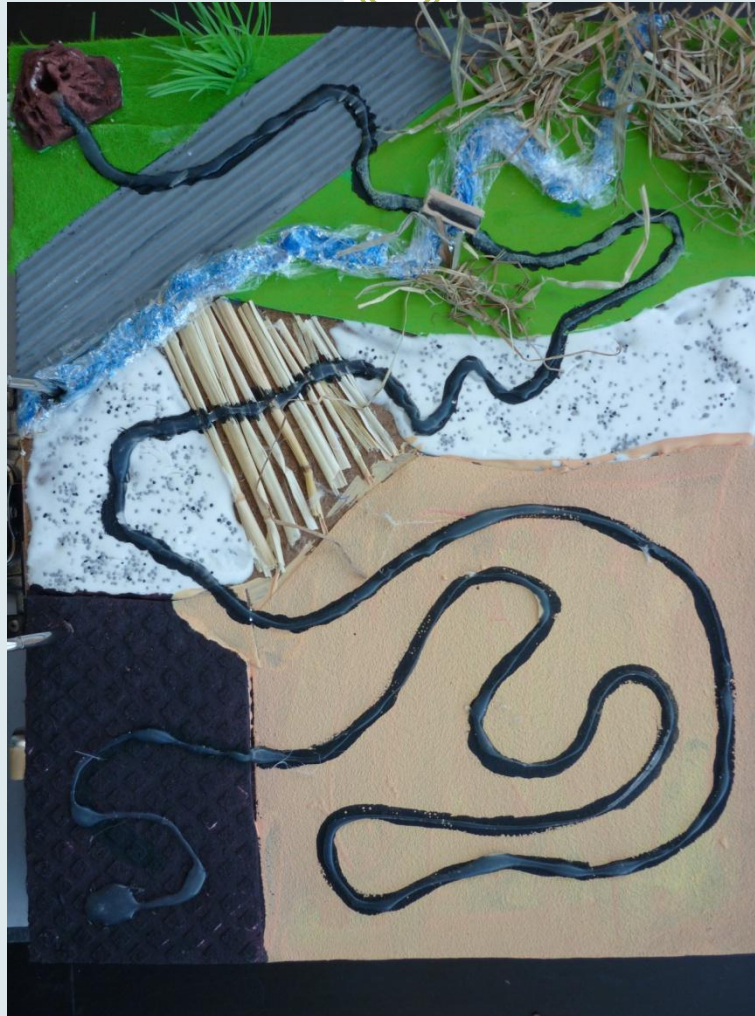
Field of stones



Round the



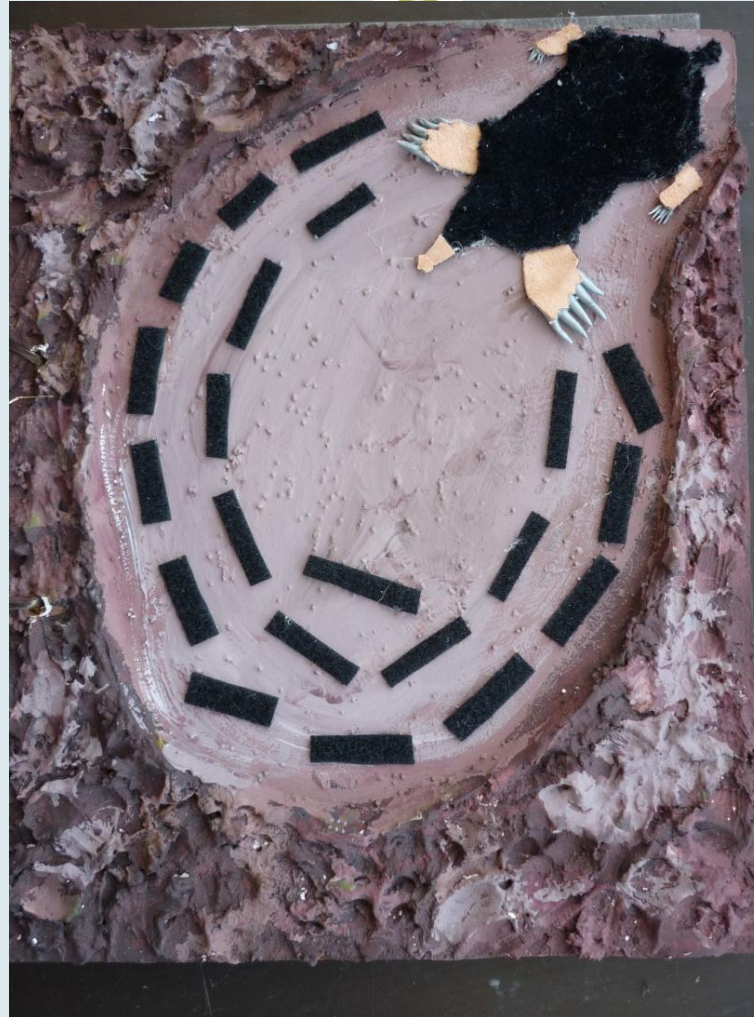
Way home



Hungry Willi!!



Sweet new home!!!



results



- Which strategy?
- Story – strategies -> balance
- Sometimes too 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!!!!