Subject : Sensorial (Lab 5)
Group : Visual Sense
Topic : **Knob less Cylinders**

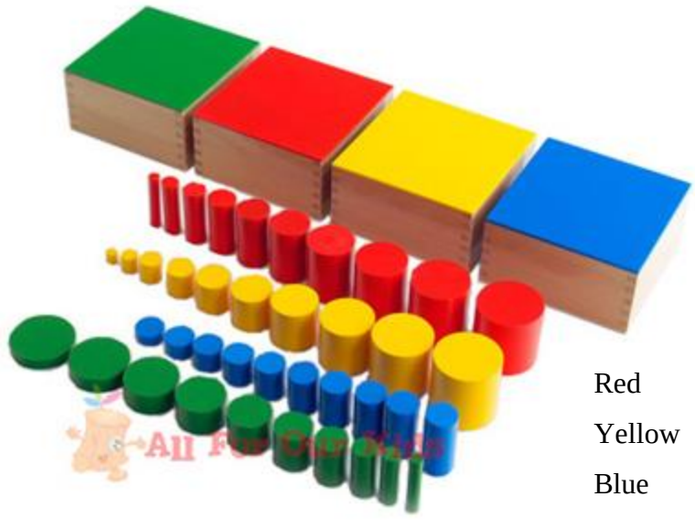
Description of Materials:

Four boxes each with a set of 10 cylinders:

- Set A is blue, differing in one dimension – height

- Set B is red, differing in two dimensions – width and breadth

- Set C is green and Set D is yellow, they both differ in all three dimensions, though Set C does so inversely and Set D regularly.



Red

Yellow

Blue

Green

Direct Aim:

- Grading by size
- To train the eye to perceive fine differences in dimensions
- To recognize difference and similarities (when using more than one set)
- Co-ordination of movement

Indirect Aim:

- Co-ordination of movement

Control of Error

If a child builds a tower, the tower will fall over if the mistakes are great. However, by this series of exercises, the child uses his own visual ability to discriminate as a control of error.

Language

Set 1 and 2:

Large - Small
Large - Larger - Largest
Small - Smaller - Smallest

Set 3:

Thick - Thin
Thick - Thicker - Thickest
Thin - Thinner - Thinnest

Set 4:

Tall - Short Deep - Shallow
Tall - Taller - Tallest
Deep - Deeper - Deepest
Short - Shorter - Shortest

Approximate age

3 to 5 years

Presentation

Invite the child to come and work with you. Bring him over to the shelf and tell him we will be working with the knobless cylinders. Show him the red box and have him bring it to the table, placing it on the right side of the table.

Procedure 1: **The Red Box**
- Open the box and place the box onto its lid.
- Remove all of the red cylinders and place then randomly to the left of the box and place the lid back on.
- Pick up the thickest cylinder and very quietly place it to the left of the table.
- Grade the red cylinders from thickest to thinnest.
- Make sure they are lined up all having the same center point.

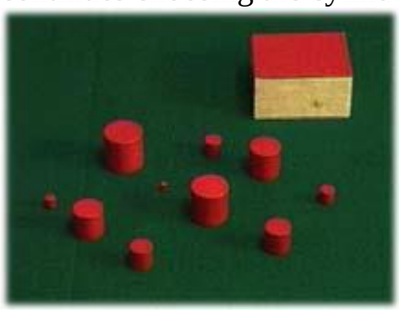
- You and the child stand up from the table and look at the cylinders from the top and from every side. (Make sure the child gets to where the table is at nose level to truly see them lined up.)
- Both you and the child sit down and you mix up the cylinders.
- Then have the child grade them.
- Show the child how to put the cylinders back into the box by placing the thickest to the thinnest back in.
- The child can work individually on one box at a time: the red box, the green box, the yellow box, or the blue box

Procedure 2: The Red and Green Boxes
- Take out the red and green box.
- Grade the red as in Presentation 1.
- Take out all of the green cylinders and have the child grade them from shortest to tallest, directly in front of the red cylinders.

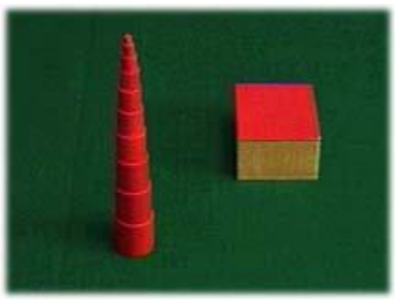
- Look at it from all directions.
- Grade the red cylinders in reverse, and this time in front of the green cylinders so you are now comparing them in the other direction.
- Superimpose one over the other but always keeping the one with the larger base on the bottom.

The teacher may show the child how to either build the set into a tower or how to grade them in a row.

To Build A Tower: The teacher lays out a green mat on the floor and brings a box of the knob less cylinders to the mat. (These are used on the floor because they would be too tall for the child on a table.) The teacher sits beside the child and shows the child how to slide the lid off the box, and place it under the box. The teacher removes the cylinders from the box, placing them in a random order as they are taken out. The teacher then selects the largest, placing it away from the other cylinders. Pause. The teacher lets the child see she is deliberately selecting the next larger cylinder. She places the cylinder concentrically on top of the largest cylinder in one movement. She continues choosing the cylinders in order and builds a tower.



At any point a child will join in. If the child knows what he or she is doing, the teacher allows the child to take over. If the teacher completes the tower, she takes it down one cylinder at a time before the child builds it.



To Grade The Cylinders: (This can be done on a mat on the floor or at a table.) The teacher sits next to the child with the cylinders in mixed order. She arranges these in order of size beginning with the largest. She shows the child how to move carefully and place the cylinders so they are touching one another.

The child may help him or herself to the other sets in turn using each in the same way, or the teacher may give the child a lesson if he or she needs help.