



BE_Class_ModelingWax_LEnvironm

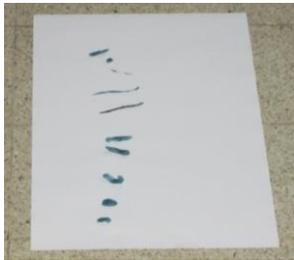
Teacher Education Design Principle + code:	14. Teacher education should equip teachers with knowledge and skills to use a range of formal, non-formal and informal learning environments, including the outdoor environment, both the school grounds and the wider environment beyond the school, in their teaching of science and mathematics. TE: LEnvironm
Specific Teacher Outcome(s):	14.1 Teachers should be able to make use of varied settings for science and mathematics learning, including flexible use of the environment both indoors and out.
Factors linked with:	T:Ped
Type of material (image – interview (int) – classroom extract (class):	Classroom
Originating from:	
Country report :	D4.3 – report Belgium
Case:	Case 3
Episode:	Modeling Wax
Teacher:	Katrien
Age Group:	3
Selected episode present in D4.4 Appendix	No



Young children learn about short and long through play and explorations in different activities. Afterwards reflection and reasoning is fostered.

The children are working about “Art”, amongst others they learned about painters, e.g. Mondrian. When the children were working about the painter Mondrian, they came across different forms and lines. They copied some of his works, using paint, stitch beads; they made them in the sandbox ... Based on these experiences the teacher thought of how she could do something about short lines. She created several activities with similar goals; these are described in the episode below.

This episode is introduced after the morning rituals, when all the children got a piece of modeling wax and were asked to make a sling. Afterwards the teacher asked to place their sling on a piece of paper (see picture).



The teacher asks: What do we see now?

Children: all different

The teacher asks: What kind of differences do you see?

Child 1: these ones are bigger

child 2: These ones are longer.

The teacher says that it's so and brings in slings of paper.

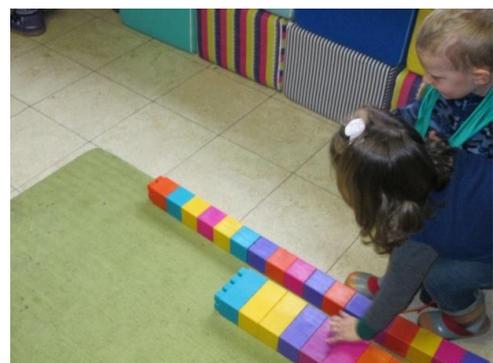
The teacher hands out slings of different length to the children. Once the children have received their sling they start to compare with each other. As she notices the children are moving with the sling, she decides to bring in music and she let the children dance with the slings, after a while she brings in another sling for each child. After this phase the teacher brings in the materials for the corners. The children may choose with which materials they will play, but all the activities are linked to the concept of large and short lines. The teacher has foreseen 7 activities, so not all the activities will be chosen by the children. After the choices have been made they are allowed to go to the different corners.



In all the corners there were chances for the children to experiment with the materials, in order to gain insights in long and short lines. In each corner the children started to compare spontaneously. If necessary the teacher acted as guide or coach, she went from one corner to the other.

Description of the 7 activities (corners):

1. Sand box: in the sand box, the children weren't offered any material but were given the assignment of making lines by making little holes in the sand with their fingers.
2. bottle closures: in this activity it was meant for the children to make lines of different length.
3. stitch beads: with the stitch beads the children could make lines of different length and placing them right below each other.
4. pearl necklace: with the pearl necklace the



creative little SCIENTISTS

children could make a long and short necklace.

5. doll corners: making spaghetti: in the doll corner the children were cooking spaghetti, French fries, long sausages. In the conversation of the children you notice they were experimenting with the concepts of long and short.
6. building with boxes: in this corner there were two rows of boxes placed next to each other and the child was building by selecting the right box for each tower.
7. making slings with modeling wax: in this corner several children were making slings with the modeling wax, and so experimenting with long, short, big, thin, After a while they could start comparing their slings ...



Another important factor of this approach was that the teacher had foreseen other activities after the play time; these were also building on the same goals. In that way, she offered opportunities for the children to transfer their constructed knowledge to another context. So the children could make long and short door ribbons, paint slings on paper, make painting with lines, making lines on a mirror that was covered with shaving foam.

During the activities the teacher was present in the classroom and she went in every corner and made conversations with several children. For

example she was involved in a role play where she ordered long spaghetti; she went to the beauty salon where she wanted to buy a short neck less... After the activities the teacher called the children together to look at the processes and products of the different corners. For example in the short episode below the reflection about building with boxes is described.

The teacher goes with the children to the corner with the boxes. There she steps on the boxes using her fingers, first on the short one and then on the long one.

During this action she says: 'oh this goes fast and oh, this takes a while.'

Afterwards she asks one of the children to do this and then she asks which one is the shortest. Afterwards you see the children trying to walk with their finger on to the boxes themselves.

In the fragment above, you might notice that the children are given the opportunity to evaluate themselves. During these feedback moments (or flash back moments) the children are involved actively.



© 2014 ARTEVELDEHOGESCHOOL

This work is licensed under the Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International License. To view a copy of this license, visit <http://creativecommons.org/licenses/by-nc-nd/4.0/>.



The project CREATIVE LITTLE SCIENTISTS has received funding from the European Union's Seventh Framework Programme (FP7/2007-2013) for research, technological development and demonstration under grant agreement no 289081.