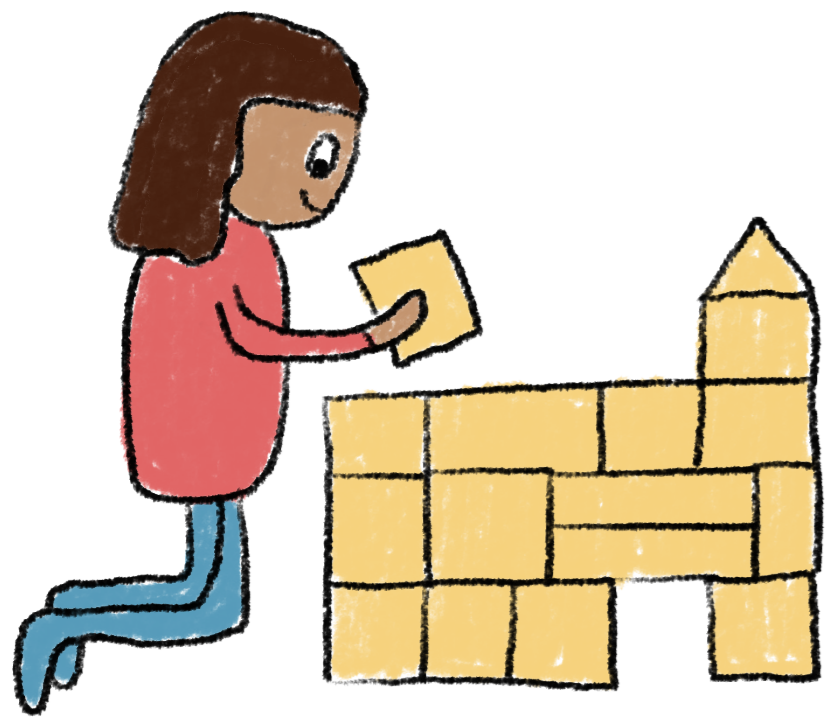


# Let's play!

## Accommodating Individual Play Preferences of Preschoolers in Design Education Focused on Spatial Ability

### Play preferences influence the interaction with a design activity



#### Construction play

Children are building and creating and experience freedom to make whatever they want. They mainly enjoy building itself and do not necessarily have to play with what they have made. Then they rather build something else.

While designing, they're often building sturdy, structured prototypes. They make a plan and implement it.



#### Defined materials

These materials look like something and represent something. It gives a starting point, for example it is a car, and the child has the freedom to choose how that car is used in the game.

By working with defined materials, children learn to take requirements into account.



#### Pretend play

Children take on the role of someone else. They play as if they are another person and experience freedom to be who they want to be.

While designing, they're often very committed to the target group. They empathise and often create very specific (partial) solutions.



#### Open-ended materials

These materials do not represent a specific concept. Children give meaning to these materials and use it for all kinds of different things.

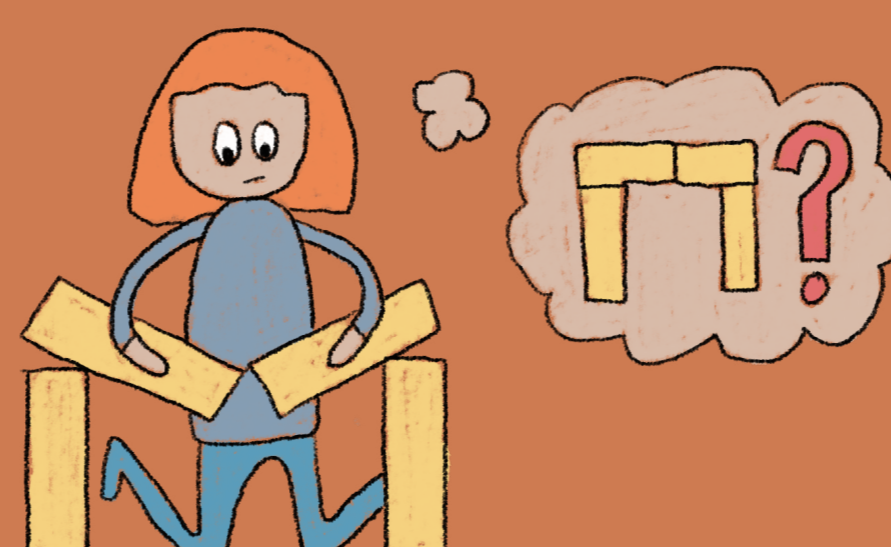
Open materials invite prototyping and trial and error. Children give meaning to the materials themselves, and if it doesn't work, they change it to something else.

### Design activities challenge the spatial skills of preschoolers



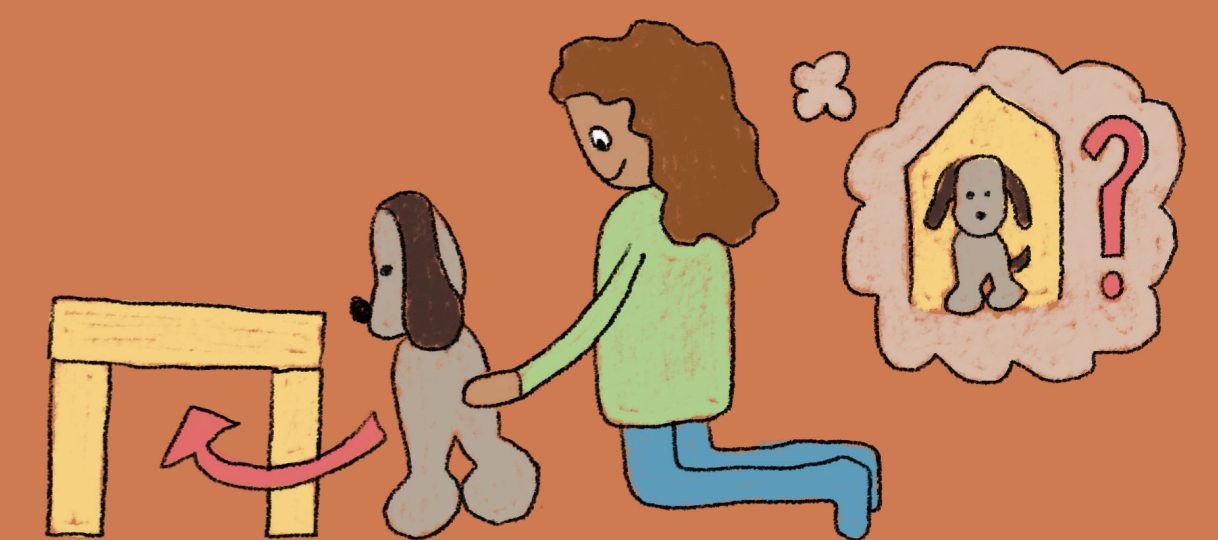
#### Understanding needs

Children have to understand the needs of the target group and thereby be able to take on different perspectives.



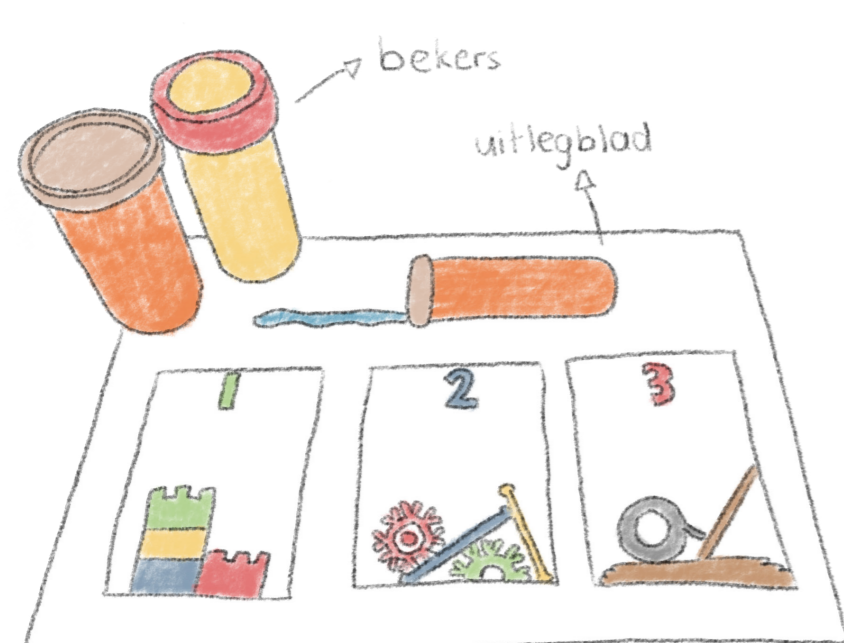
#### Fulfilling needs

There is a goal and children need their spatial skills to achieve it. For example: how do I build a roof?



#### Testing in relation to needs

While testing concepts, preschoolers encounter all kinds of issues that require their spatial abilities to solve them.



**Offer variations of design assignments, centred around the same spatial learning goal, so children can interact with the one in line with their play orientations.**

