

# Story Blocks

A tangible language for teaching children Computational Thinking through storytelling.



## TEACHING PROGRAMMING IN PRIMARY SCHOOL

Primary school teachers are increasingly expected to teach technology understanding and programming concepts. Only a few teachers have a background or training within IT, resulting in the teachers being poorly equipped to take on the responsibility of teaching the subject. Additionally, teachers have limited time for further educating themselves, and it can be difficult to find out how to approach the task.

## CONCEPT

The concept consists of four abstract Story-classes: **Blocks**, **Hubs**, **Characters** and a **Environment**. By using the Blocks children can construct **logical statements** that can be connected to the hub to define the behaviour of the environment. The children can then use the characters to act upon the environment, which will then react based on their statements. To the right you can see our implementation in a world called "The Smart House"

## Supporting the teacher



Opening the black box of programming



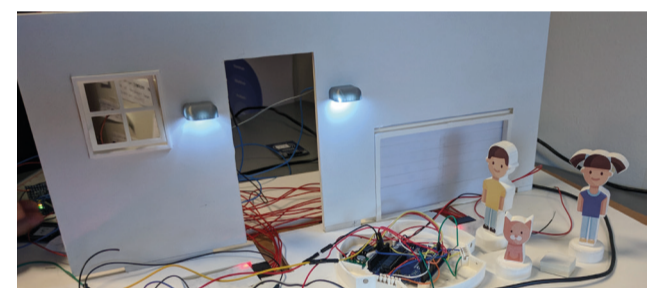
Accommodating limited time



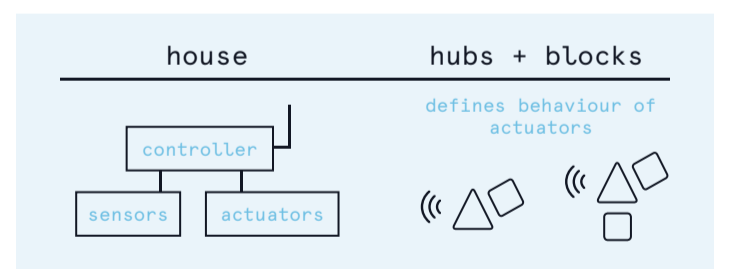
Facilitating differentiated teaching



## "The Smart House"



characters

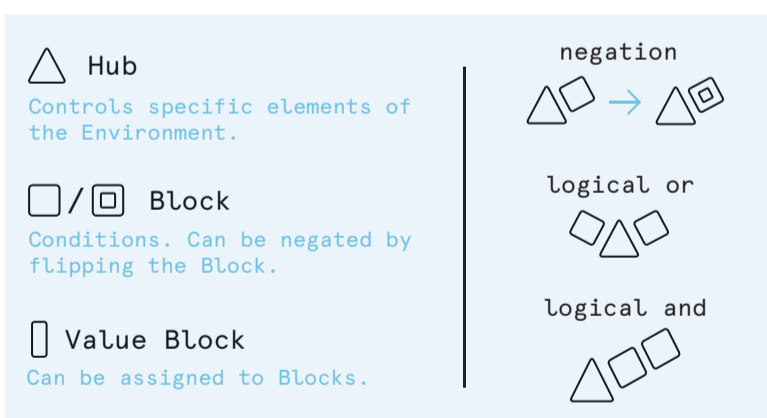


reactive environment

blocks

hub

system

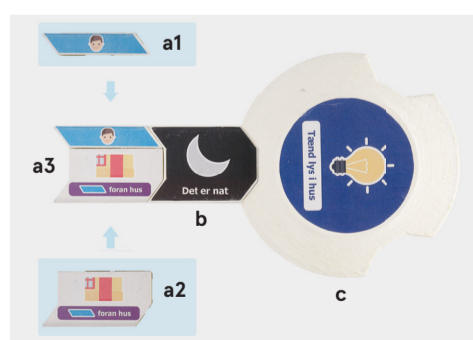


## SCENARIO



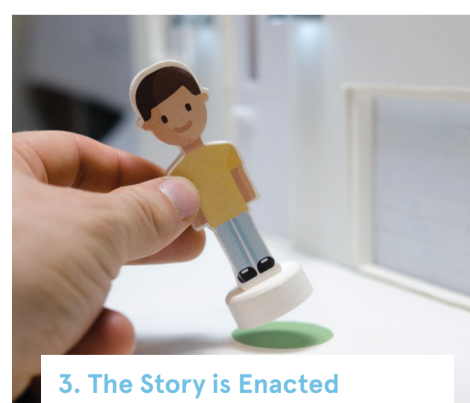
### 1. Child narrative

"The boy would like the light to turn on when he is in front of the house, and it's dark outside".



### 2. Logical statement is set up

Variable "Boy" (a1) is added to "In front of house" (a2) forming "The Boy is In Front of The House" (a3) and is joined with "It's Dark outside" (b). The statement is added to the "Turn on Lights" hub (c).



### 3. The Story is Enacted

The "Boy" character is placed at the position "In front of the house" during "Nighttime".



### 4. Environment Realtime Feedback

The lights in front of the house turn on. The child is given feedback based on their condition, and can make changes to support the story.