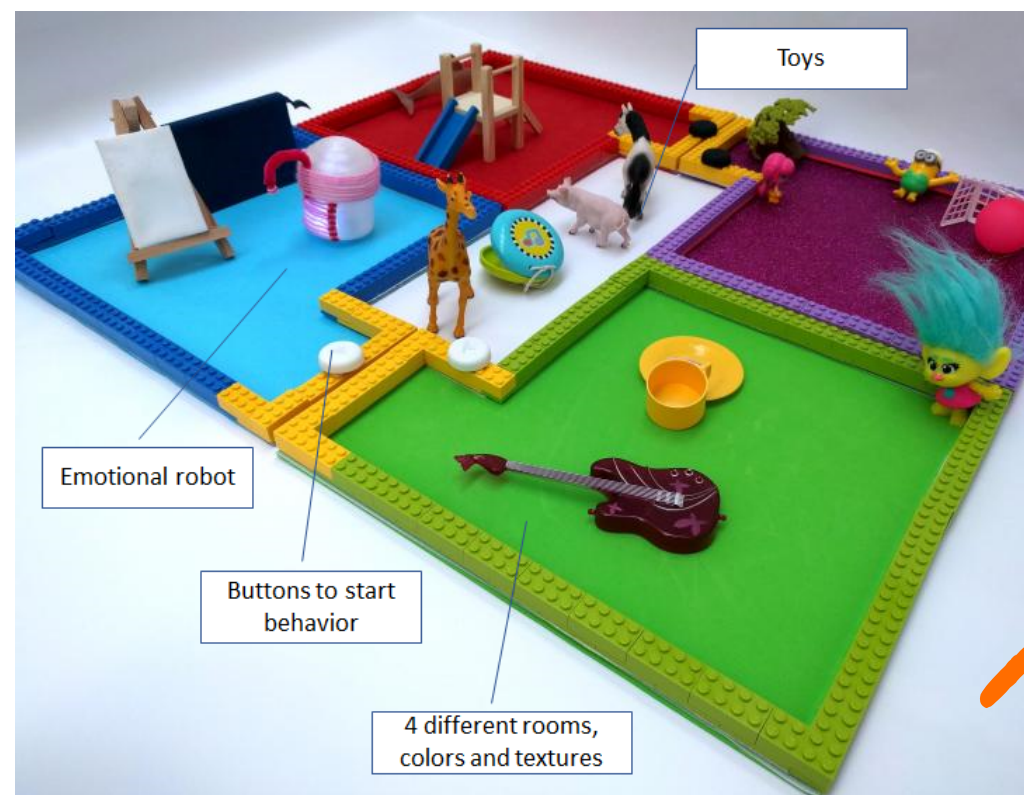


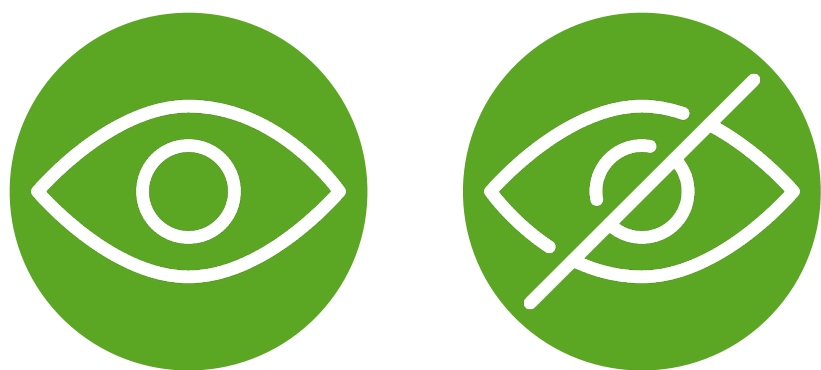
# Inclusive R Stories

## An Inclusive Storytelling Activity with an Emotional Robot

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Inclusive'R'Stories is a prototype mainly composed of a multisensory workspace and a robot with multimodal behaviors, that offers children with mixed visual abilities the opportunity to evenly co-create a story.



mixed-visual abilities dyads

### Within-subjects User Study

Control: The robot is turned off

Experimental: The robot has emotional behaviour

**RQ1:** Are multisensory environments and robotic devices effective in supporting inclusive storytelling experiences?

Auditory, visual and tactile elements made children engage autonomously regardless of their visual acuity

Spatial Orientation

**RQ2:** How do the robot's emotional behaviors affect the content of the story?

Children included more emotive elements in their stories in the emotional condition compared to the control condition

Emotional Intelligence

**RQ3:** What strategies, roles, and behaviors do children adopt in mixed-visual ability storytelling activities?

Most groups co-created the story while exploring the workspace, and asked their peers for help whenever needed

Awareness to Inclusion

### Guidelines to Inclusive Design

- Robotic Multimodal Expression -> Children's Perception
- Multisensory Workspace -> Autonomous Exploration