Problem Statement: Children lose interest in reading books because of their monotonous nature, and often turn to video games because of the compelling stories they tell. Both books and gaming help in increasing problem solving abilities, but only one of them is actively enjoyed by the children. Why? Because compelling stories which children can be a direct part of are more engaging than books. Could there be an environment in which children are a direct part of a compelling stories, which are trying to make them learn a wide range of facts and subjects?

Solution: The interactive environment designed would be a room which would be transformed into a world of the child's choice, which would have them perform wide ranging activities that would help in developing language skills, motor skills, and aid overall cognitive development. A tablet installed outside the room would require the child to choose a story of their choice, and using projectors, sensors and microphones, the room would be transformed into an interactive version of the story itself where the child would get to role play as the protagonist of the selected story. The story would be broken down into different chapters, and each chapter would consist of several exercises. Stories were chosen as the interactive experience because, according to studies, storytelling helps children empathise and have a wider perspective. Further, since the environment would change entirely based on the child's choice, the interactive environment is something that can be used for children of all age ranges as the difficulty and matter of the curriculum tackled would be something that could be adjusted and selected by the user themselves.

In order to clearly explain what the environment would be like, the story selected as an example is Alice in Wonderland. The following is a small description of the activities a child would be required to do in the environment:

Alice, a girl of seven years, is feeling bored and drowsy while sitting on the riverbank with her elder sister. She then notices a talking, clothed White Rabbit with a pocket watch run past. She follows it down a rabbit hole when suddenly she falls a long way to a curious hall with many locked doors of all sizes. She finds a small key to a door too small for her to fit through, but through it she sees an attractive garden. She then discovers a bottle on a table labelled "DRINK ME," the contents of which cause her to shrink too small to reach the key which she has left on the table. She eats a cake with "EAT ME" written on it in currants as the chapter closes.

In this part of the story, which would be told to the child through speakers and visuals on walls, the child would be required to "find" where the White Rabbit is hiding. Once the rabbit is found, the child would be required to tap the rabbit on the wall. Sensors would detect that action and the story would progress. The child would then be required to go over to the rabbit hole on the floor and would be told to jump on it through the speakers. Only after the action is completed would the story progress.

On progression of the narrative and upon reaching the next activity, the child would be required to match the key to the right door, which would be a puzzle game.

Upon touching the "Drink me" bottle, the graphics would zoom in, changing the view and perspective of the player, and the opposite would happen on touching the cake.
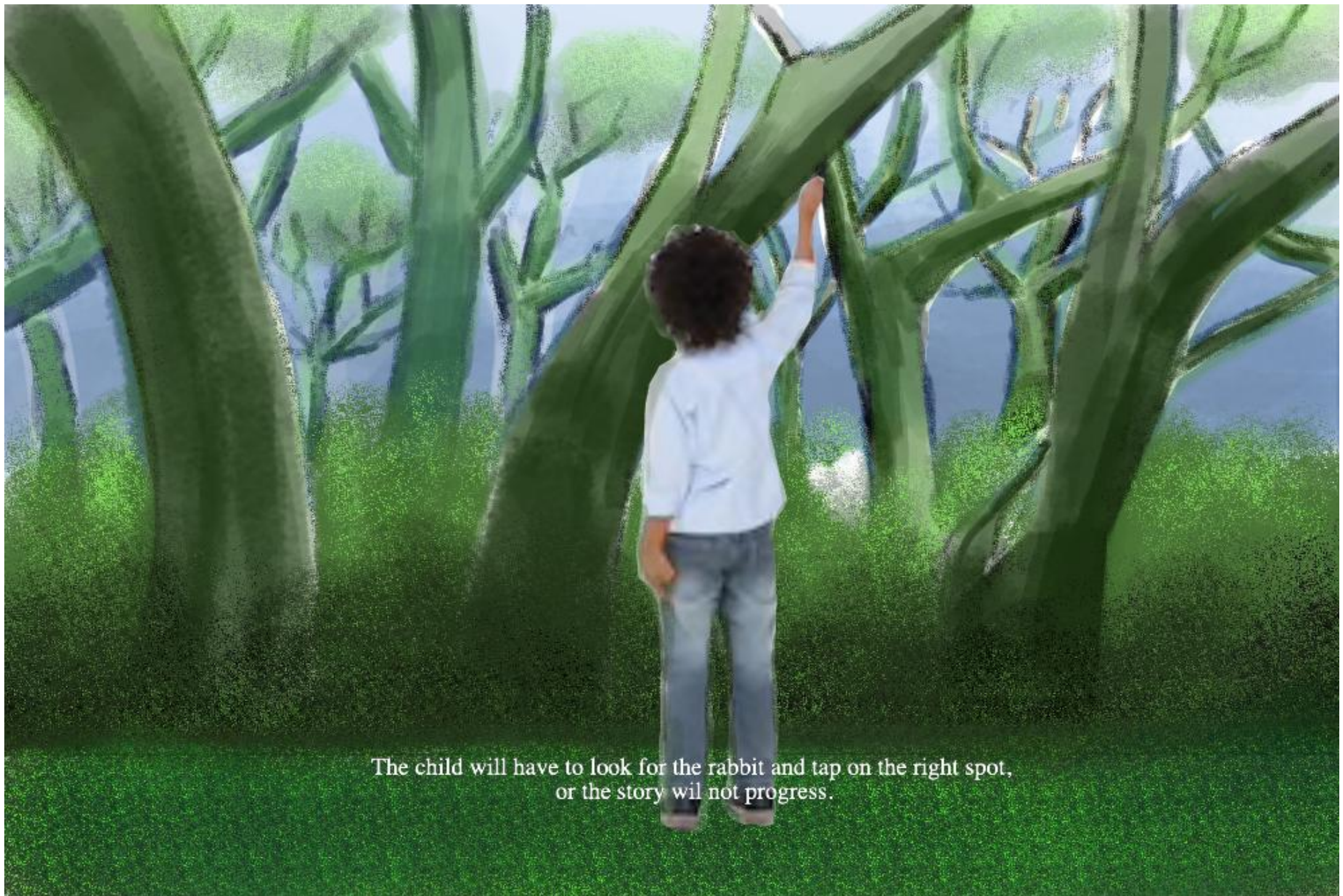
Story Source: www.wikipedia.org

The walls would display a scene from the story, i.e., the rabbit running.
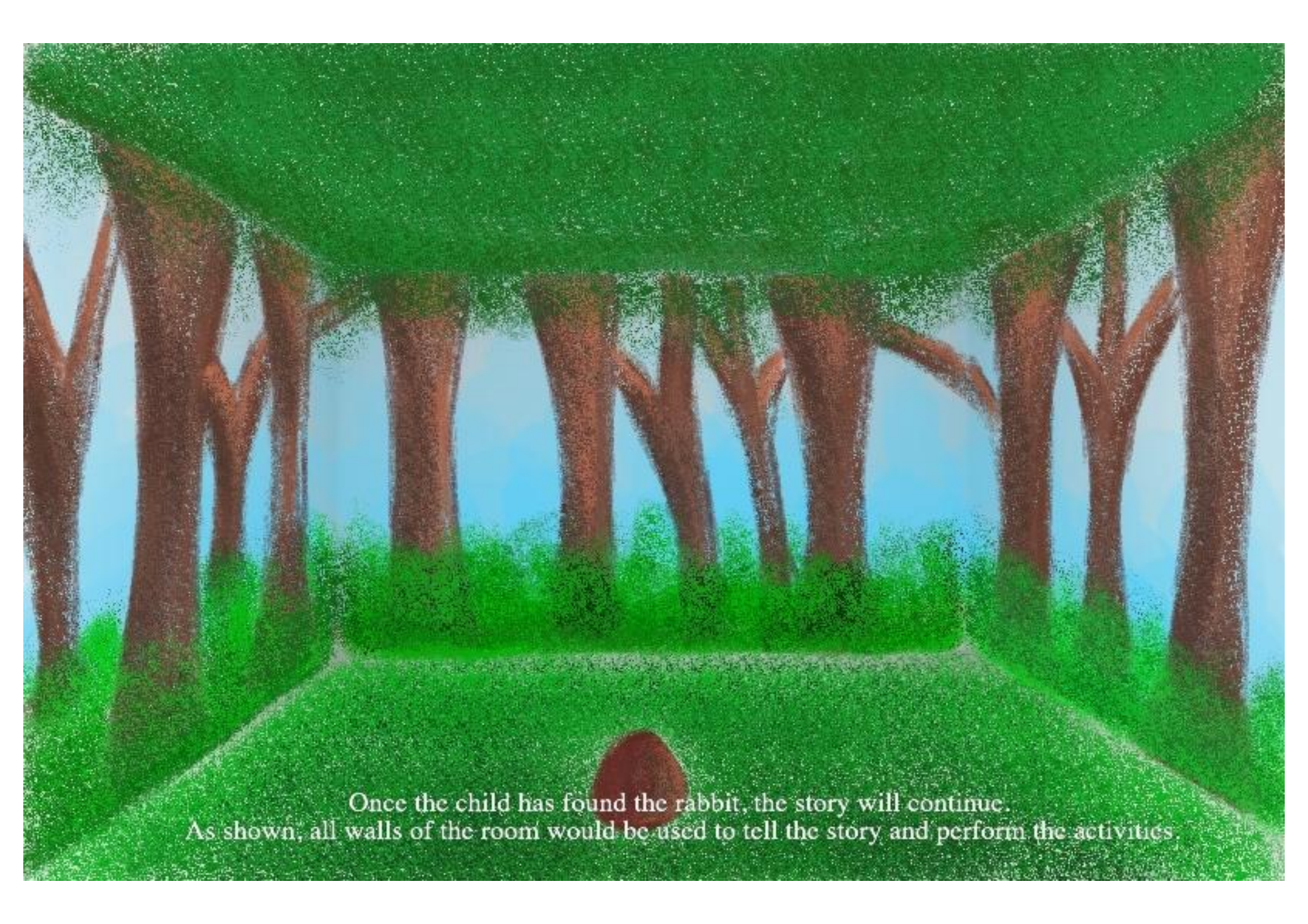This scene would be accompanied with music and narration.

In the continuing scene, the rabbit would hide.
The narrator would prompt the child to find the rabbit, and tap where it is hiding

The child will have to look for the rabbit and tap on the right spot,
or the story wil not progress.

Once the child has found the rabbit, the story will continue.
As shown, all walls of the room would be used to tell the story and perform the activities.