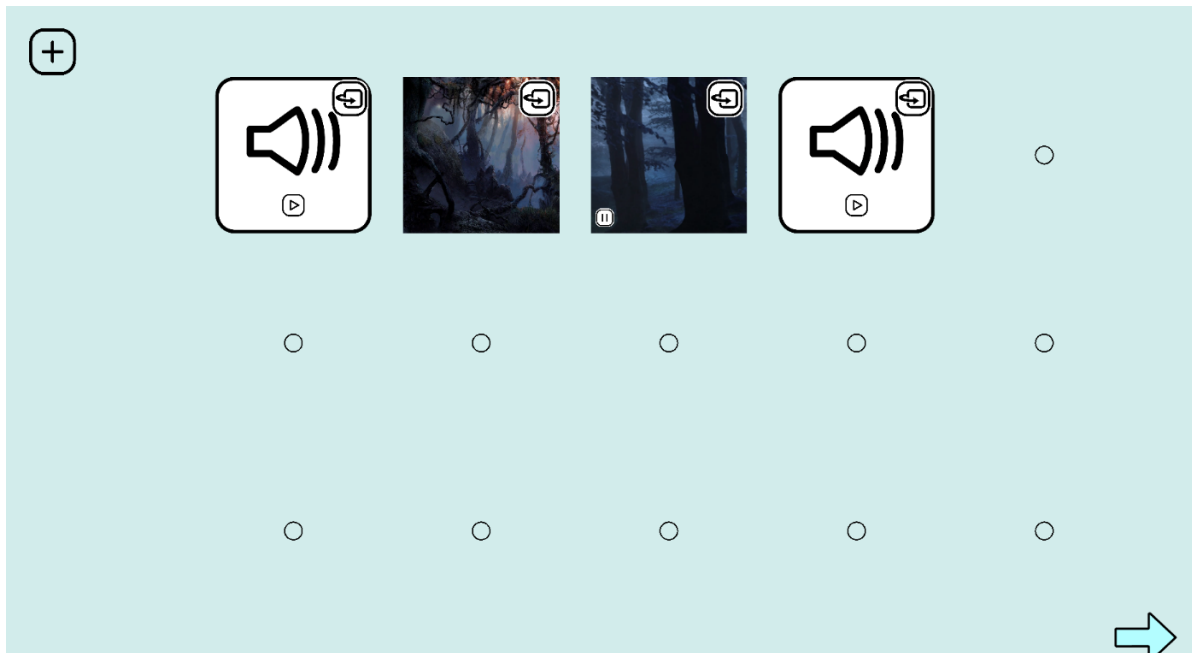


# StoryTell: a digital multimedia storyboarding tool for children with dyslexia (summary)

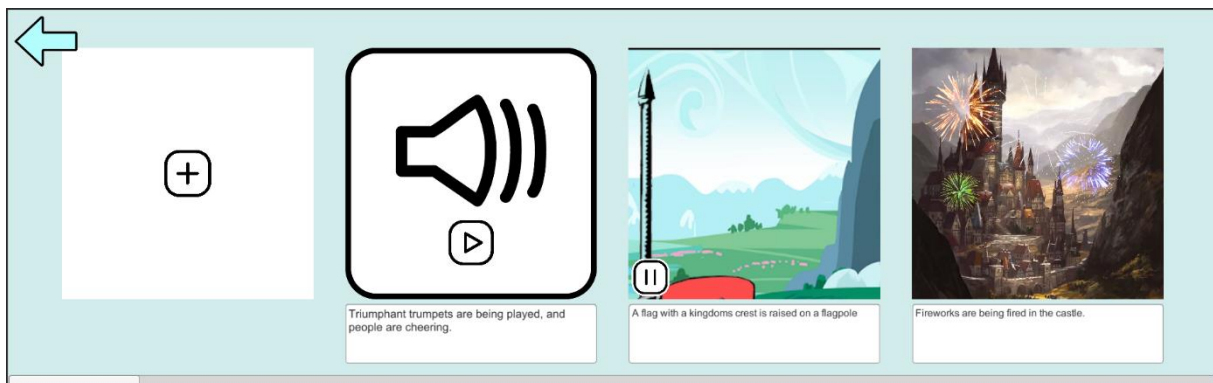
Children with dyslexia have a hard time in school; they deal with issues surrounding self-esteem and the feeling of being inferior. Dyslexia is the most common learning disability and is described as a learning disability that causes phonetic reading and writing problems. Elementary school in the Netherlands is centred around the ability to read and write. Of course, there are subjects like language and grammar. However, even subjects that seemingly have nothing to do with language, like mathematics, use it. The most significant example of this is the so-called story problems in which a mathematical problem is described in a story. Our society is so heavily built around the written word, so it is essential that everybody has a sufficient skill level to be able to function in this society. Therefore children with reading and writing difficulties must be supported in their learning journey. These children have to learn to work in a society that their mind is not necessarily the most suited for because of the difficulties for dyslexic children with these language-based subjects. It can be very frustrating and demotivating to see peers succeed and while they are falling behind. So how can we make sure these children have the support they need to learn the required skills? This design project attempted to create a digital tool that will help children with dyslexia with motivation for learning how to read and write. This will be done by showing what the possibilities are when someone can read and write and why someone would want to learn it.

Through research and iteration, the concept of a multimedia storyboarding tool for kids was developed. This tool was meant to be used in classrooms, in groups or alone, and at home. The multimedia aspect of the tool means that the user can not only make their story with images and text but also by using audio and video files. During the project, multiple prototypes were created to see how the product would work and get feedback on its functionality and usefulness—most of the prototypes were created using the program “Unity”. Unity is a game engine, meaning it is mainly used for developing games.

However, the easy user interface tools also allow you to create programs or tools in it. The first completely functioning prototype was tested with peers that are familiar with design. This was done because access to the target group was limited. With this first test, decisions about the layout functionality and missing features could already be made before testing it with the target group.

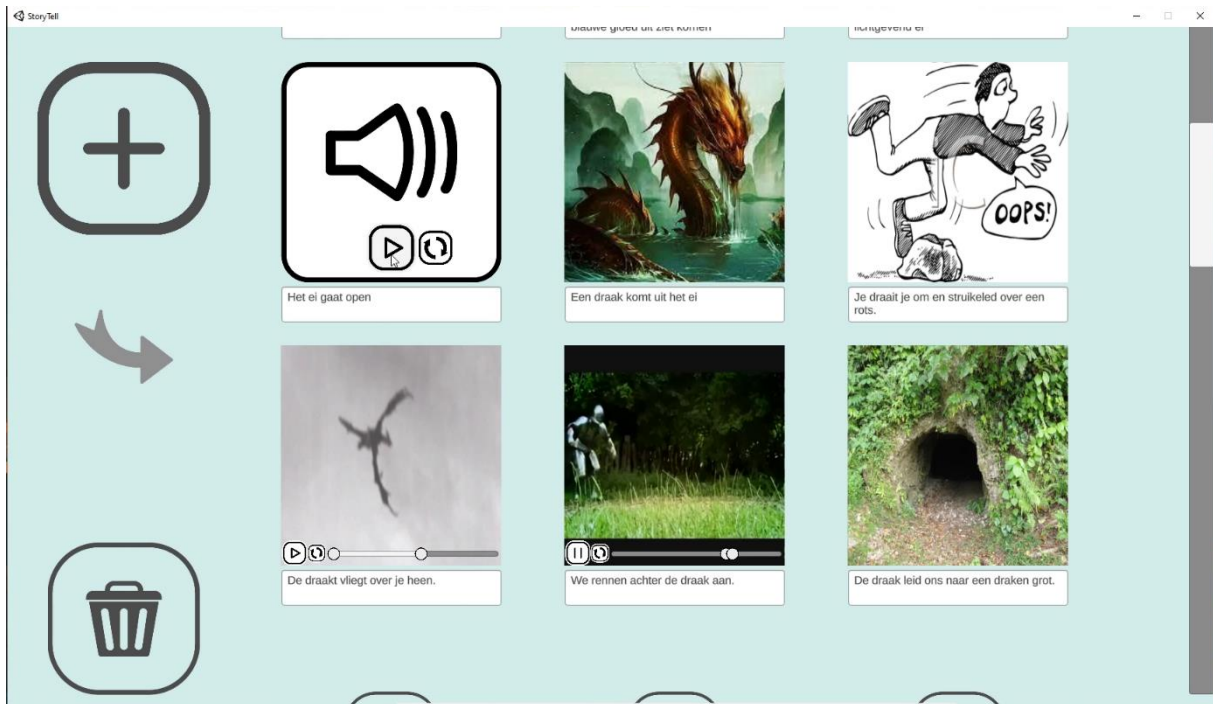


Prototype 2 version 1 (tested with peers)



Prototype 2 version 2 (tested with peers)

The final prototype was then tested with the target group. The results of the test were the following: The kids liked using the program and wanted to use it again. In addition, multiple kids mentioned that they preferred making a story in the program compared to writing it.



*Prototype 3 (tested with the target group)*

However, although the tool shows promise, there is still a lot that can be improved—especially in terms of usability, making the program easier to use, updating the look, and implementing features like sharing or presenting your story. Because the product shows promise, it would be recommended to update the prototype with the learnings from the test and do a more extended test to see what kind of long-term effects the tool can have on the motivation of reading and writing.