

## Inclusive library for youth with dyslexia, ADHD, and/or autism

**Libraries have a significant role in understanding the needs of youth with varying cognitive abilities and ensuring that they feel included. I proposed a concept building on QR codes that could potentially make libraries more inclusive and accessible for youth with dyslexia, ADHD, and/or autism.**

Our information society makes it increasingly important to be able to access, decipher and understand different sources. Youth with varying cognitive abilities could easily be excluded from informational sources made for the average users. My thesis therefore investigated and proposed a solution for how school libraries could include and empower youth, between the ages of 13 – 19, with dyslexia, ADHD, and/or autism.

My study showed how complex it was to simultaneously work with several user groups, but it also proved to be valuable for developing more inclusive solutions. My research further revealed that a broad exploration was necessary to investigate, identify, and understand how exclusion was expressed in the current library environment, as the exclusion often lied in the details.

I identified several needs through the study, relating to the thesis target group's diagnostic challenges, library atmosphere, lighting, color, sound level, physical layout, as well as navigation and information access – pretty much relating to most aspects of indoor environments. My study also showed that it was important to consider how the different needs interacted and influenced each other, as the three considered user groups had very different needs. Focusing on one need area, without having considered the rest, would have led to the development of less inclusive solutions.

Following the broad exploration, I focused on developing and suggesting an improvement for the theme navigation and information access,

whilst still keeping the insights from the remaining need areas in mind.

I found that the target group struggled with the task of finding what they wanted in the library by themselves; making the task feel difficult, stressful, and very time-consuming. Libraries are text-based and so needing to read just to find a book made the task of reading even harder; causing many youths to early develop feelings of exclusion and not belonging. Youths with ADHD also struggle with their concentration, which could make the task of finding what they wanted in the library even more difficult. Needing to ask for help for tasks that everyone else managed to solve on their own, made some feel awkward, ignorant, and inconvenient.

I developed, tested, and evaluated a concept called Nudging QR codes to help meet some of the target group's expressed needs. The concept involved the use of QR codes on library shelves and on the back cover of books; both leading to informational audio files. The library shelves' QR codes gave the users information about what type of books were stored in the shelves, as well as an inspirational sneak peek into a book. QR codes on the back cover of books contained an audio version of the books' backside texts. I also developed, tested, and evaluated a prototype of a web application for creating and managing audio and QR code files on a larger scale.

The youths and the pedagogues, who tested the developed concept, believed the concept would have a positive impact on the target group. Nudging QR codes could potentially make the thesis target group feel more included in the library and I believe the concept is therefore interesting to further explore and develop.