## **CONCENTRIX - THE FLEXIBLE ROOM DIVIDER**

Britt van Slooten Industrial Design Engineering University of Twente The Netherlands

Designing a room divider to give children a comfortable workplace that helps them focus in primary school.

The design research presented in this thesis is directed toward SindsNu, a creative marketing company not traditionally familiar with product design. SindsNu conceived the idea of a room divider for primary schools but lacked time to fully develop the products. This roomdivider consists of four panels, interconnected with hinges. The focus is its flexibility, being able to move the roomdivider when it is not in use. SindsNu seeks a fully developed product that can be used at primary schools. The research question addressed in this thesis is:

What are the functions and best design appearance of a room divider to give primary school students the focus they need?

The design process starts with literature, followed by ideation, prototyping, testing the prototype, and finalizing with recommendations for future development.

Through literature review, interviews, and codesign sessions, the user needs were identified and integrated into the ideation phase.

The ideation phase is divided into two parts. The initial ideation is specifically focused on the concept envisioned by SindsNu, evaluating its feasibility through sketches. The outcome of this phase led to a 1:1 prototype, which consists of four panels, interconnected with hinges, and covered with a layer of sustainable PetFelt. This prototype underwent testing in three primary schools, leading to valuable recommendations. The positive reactions of the children were due to the comfortable feeling of PetFelt, stimulated by its soft texture. The teachers were enthusiastic about the fact they could still maintain an overview due to its 1200 mm height, while the children were focused on an assignment. Some problems arose during testing, e.g., the wheels were not as flexible as expected and the PetFelt was not secured tightly. To improve the way the PetFelt is attached, another small prototype was created, shown in Figure 3. These recommendations



Figure 1: the room divider

phase. This phase was concluded with 3D models, as shown in Figure 1.

The second ideation phase incorporated feedback and ideas beyond the initial concept, resulting in future recommendations for SindsNu. The idea of incorporating tables within the room divider was ideated and developed. 3D models were created of this idea, shown in Figure 2.

are used as inspiration for the second ideation Thethesis concludes the importance of avoiding excessive design that introduces unnecessary distractions. The proposed solution focuses on helping children in concentration by offering a comfortable and serene workspace. This is achieved through the incorporation of calming colors, maintaining an optimal height, and utilizing sustainable and soft materials. The result is a developed room divider that requires minimal modifications for the product to make it market-ready.



