

Empowering a Young Autistic Adult by using goal-based design thinking

Belle Wetselaar S2098474

8th of July, 2021

Young Autistic Adults (YAA) tend to struggle to be independent as their way of interacting with external circumstances is different from that of a neurotypical person. Technologies are designed for young autistic adults to help them interact with the world around them. A difficulty with these technologies is that many YAA don't use these technologies because of various reasons. Design Your Life (hereafter DYL) is a research project that seeks a way to guide YAA in finding these technologies. DYL is a cooperation between researchers of the HAN university of applied sciences and the University of Twente. DYL is developing a toolkit that includes exercises and methodologies to guide YAA in finding an assistive technology. This research focusses mainly on using a goal-based approach instead of a problem-based approach in the toolkit.

The main research question is: "How can design thinking help to empower a YAA during their daily life?". This question is answered by executing desk research on four topics: autism, design thinking, empowerment, and designing a toolkit. Insights gathered during desk research are the foundation of the developed toolkit. The toolkit is tested by conducting a case study with a YAA, caregivers, and parents. The found insights are used to alter the following co-design sessions. The case study resulted in four main insights that are discussed at the end of the research.

Desk research resulted in multiple insights. A literature review of autism resulted in insights on how it feels to be autistic. Information on design thinking provided the structure of the toolkit. Research on empowerment provided the main principles on which the toolkit is based. Lastly, insights from previous studies on designing a toolkit are taken into account when designing the toolkit. These insights are tested during the case study. They resulted in a successful outcome. The steps that are taken can be seen in *Figure 2*. The participants first described their definition of empowerment. Next, they chose a design focus: having a financial overview. This design focus guided them to a suitable application: Dyme (*Figure 1*), that helped the YAA to get an overview of his finance. However, this application could not be tested because there is no access to this application yet.



Figure 1. Outcome of the design process of participants

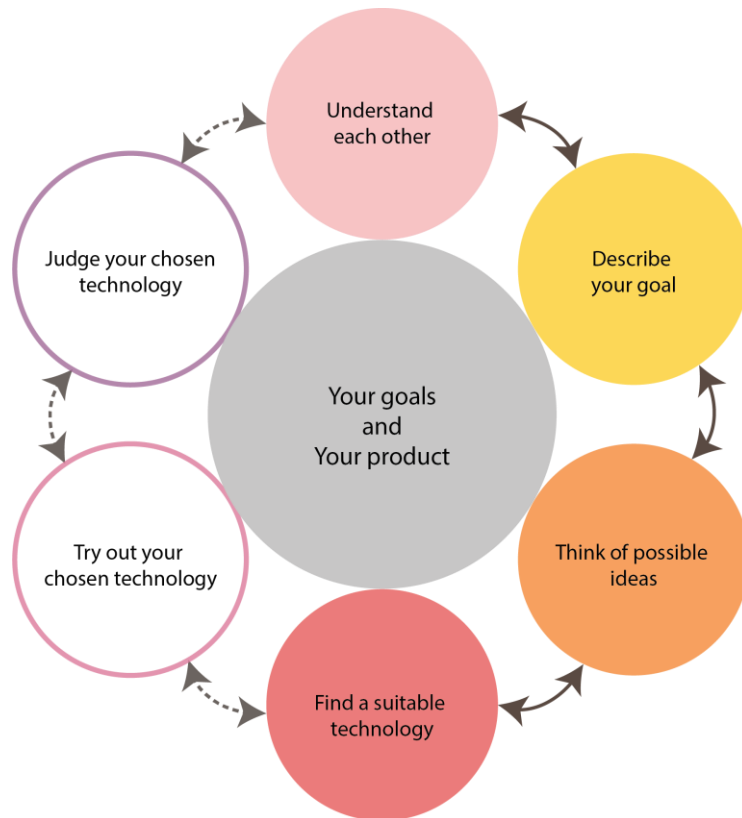


Figure 2. Themes covered in the toolkit

Overall, it can be concluded that a goal-based approach is useful when executing a design process. Combined with design thinking this is a useful approach for YAA to work towards empowerment. Next, it should be noted that a familiar environment does not need to be a geographical location. During this research, it became clear that the YAA feels more comfortable in a digital environment as it is familiar to him. Lastly, the YAA should be the main designer, and caregivers or parents should be co-designers as they switch positions all the time and the YAA will always be present during a design process that focuses on empowering them.