Profile Piece - Alfred Jones

Customisable Children's Walker for Living with Cerebral Palsy

I've always been a people person.

When I'm in the concept stage of designing a product, usefulness is the most important factor. How can I help people? And how can I do that while also helping the environment?

During my final year of Product Design at the University of the West of England (UWE), I wanted to learn about the problems faced by young people who require walkers for Cerebral Palsy.

Learning something new or developing a new skill isn't something I find daunting anymore. I'm a self-taught pianist, carpenter, and I've started running marathons in recent years.

In 2024, I completed a placement in design and construction, where I also gained experience in web design, graphic design, and branding.

I'm motivated by discovery. I want to gain understanding in as many fields as I can. This is likely why I'm so passionate about traveling too. I want to experience the world and different ways of life as much as I can (while I have the privilege to do so).

Through my research of assistive technology, and the needs of those living with Cerebral Palsy, I discovered several things about walkers:

- They are not designed for the individual user, and the limited number of sizes and adjustments available are insufficient.

- They are not designed to be appropriate for body and lifestyle (*If it doesn't fit in a car, fold up, or suit the home it is being used in, it is not appropriate).*

- They do not fit into a system of reuse. As a child grows up, or their needs change, they're required to get new walkers. If a walker gets damaged or is faulty, it is often thrown away because they are difficult to repair.

- They do not offer users the ability to showcase their personality. They come in a limited number of colours and are not designed with aesthetics in mind; they are designed only for practicality and necessity. Personal choice and stylistic preference have been given no consideration.

Landfills are overflowing today because of the lack of connection we feel to our belongings. Caring for and giving meaning to the things we own is what stops us from throwing them out.

But why would anyone feel connected to a piece of equipment that isn't designed for them, doesn't reflect their identity, and fails to function properly for their needs and lifestyle?

Every child living with Cerebral Palsy should be able to rely on adaptable assistive technology for their entire life - technology that reflects their needs and personality - with the chance to pass it on.

Using the information I'd gained from my research, I designed a walker that is:

- Tailored to the user using parametric design; every measurement and requirement is taken into consideration before it is manufactured.

- Adaptable for the user and their needs, allowing them to use the same walker throughout their lifetime.

- Entirely customizable. The user can choose their wheels, accents, colours, and overall aesthetic.

This walker is an assistive technology that gives the user freedom and a sense of pride in owning it. I have already received interest from a contact in India, who is interested in making the technology with both manufactured and printed parts.

This project isn't just about designing a better piece of assistive technology. It is about designing a better experience for the children who use them.

By focusing on people-centred design, I aimed to create a connection between the user and the product. This connection, I believe, is essential for creating something

that lasts—something that’s cherished, cared for, and ultimately, part of someone’s life story.

Produced in collaboration with Ayla Melville from UWE's Creative and Professional Writing Programme.