

Project Overview

Creating a fun coordination development aid for children with dyspraxia

AIM

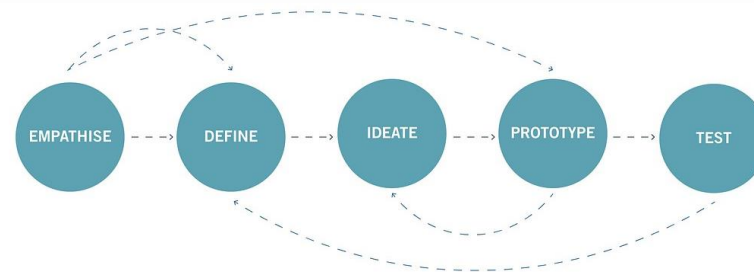
The Problem Statement

Health and wellbeing is one of the fundamental building blocks to sustain a high quality and long-life expectancy. One way to fulfil this is through physical activity and learning, however, many are affected by neurodevelopmental conditions such as dyspraxia/DCD. These conditions affect up to 10% of children and have severe effects on physical activity, classroom learning and even trying to fit in at school [1]. Current repetition exercises are used to help gradually improve coordination but can become monotonous over time. This project will focus on creating an interactive product that will help improve the effects of neurodevelopmental conditions, whilst encouraging fun learning primarily for children aged 4-15. .

The Effects of Dyspraxia/DCD



- **Children aged 5-14:** This is mainly where neurodevelopmental conditions are diagnosed. And where long lasting symptoms can be relieved as the brain is developing



The aim of this project is to create a product that encourages fun learning and helps improve coordination for children with dyspraxia

OBJECTIVES

- Design a product that gradually helps the coordination of the user through neuromuscular coordination exercises.
- Help increase awareness of early dyspraxia/DCD
- Create a cost-effective product that is widely accessible to multiple market segments and can be implemented into everyday primary school learning
- The product should be fun, which will hopefully encourage users to use it more often

DELIVERABLES

Semester 1

- Conduct in depth user and market research
- Follow an appropriate design methodology
- Create a concise PDS which will evolve throughout the design process

Semester 2

- Follow DFX to ensure the design certain criteria which will reflect in the final design
- Develop an accurate CAD model of the final design solution
- Create a prototype of the final design