



CCHMC CPR TOOLKIT

Redesigning a toolkit for Project SEARCH to make learning CPR easier for learners with IDD (intellectual development disorders) and potentially reach a larger community.

WHEN:

Spring 2021

SKILLS INVOLVED:

User testing
Prototyping
Graphic Design

CINCINNATI CHILDREN'S
HOSPITAL MEDICAL CENTER
Division of Patient Services

HOW CAN WE DESIGN A CPR TOOLKIT TO FIT THE NEEDS OF IDD LEARNERS IN CPR CERTIFICATION COURSES?



The challenge is to refine the prototype into a cohesive system, and design a process as part of the kit that can be used to teach the community trainer the basics of teaching alternative learners, and to provide greater awareness about CPR in the community.

Research

The team spent time familiarizing ourselves with the existing CPR toolkit and process of CPR certification. We benchmarked relevant training tools and games that could potentially be leveraged to create engaging and fun ways to learn the information and skills. The team conducted interviews with CPR instructors, IDD learners, a parent, and a special education interventionist to build a deeper understanding of the needs of all potential audiences and users. The team also explored graphic styles and treatments for the toolkit to ensure that the style we moved forward with was inclusive, engaging, and could be easily understood by the different target audiences. To do this, we sent a sample survey out to the different user groups. By collecting feedback early on, we could focus on developing one selected style for all elements in the kit. Together, all of this research helped to further inform our development and prototyping of the toolkit during the ideation phase.

"It's a fun way of learning CPR and you're playing a game without knowing you're learning CPR."

- Potential User

Ideation

The team held brainstorming sessions to more broadly explore possibilities for the toolkit. After brainstorming, the team then narrowed the ideas into twelve initial concepts. These concepts were visualized in the form of sketches, organized into the categories “no-tech, low-tech, and high-tech”, and shared with the Children’s team for detailed feedback. Based on the feedback, we selected the most promising and relevant parts of the concepts, created a bank of these ideas/parts, and used this bank to piece together three “remixed” concepts. The goal of the remixes was to create concepts that varied greatly from one another to cover a wide range of ideas. We made physical prototypes of these concepts and held digital co-creation sessions.

Tools Used:

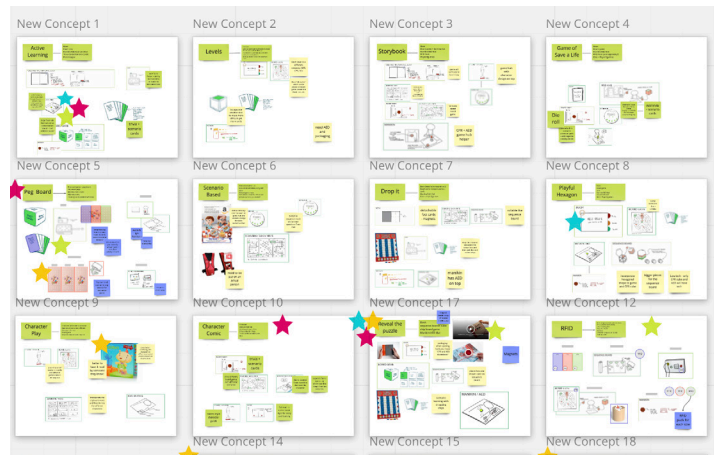
- **Brainstorming**
Team did quick sketches on Post-Its and ideated around different components.
- **User Testing**
Presented concepts and prototypes to potential users to rework ideas and understand their needs.
- **Remixed Concept**
Created bank of components from concepts and rearranged to create new ideas.
- **Prototyping**
Made prototypes of 3 concepts to help users understand concepts.

Refinement

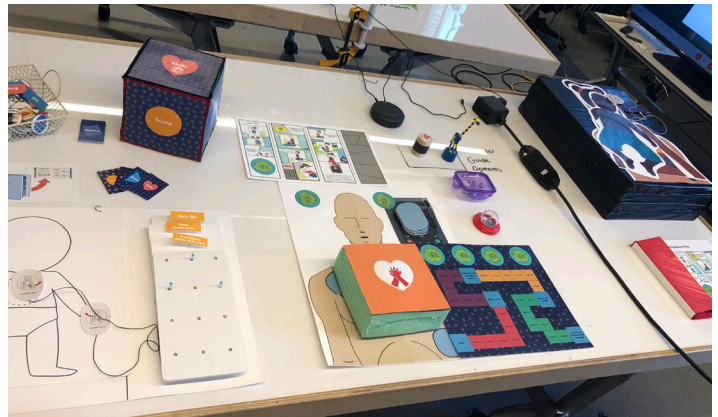
The team did another round of prototyping to create a single refined model before creating the final kit prototypes. Both the LWC team and CCHMC team conducted final rounds of co-creations with IDD learners using this refined prototype. From these sessions, the team made decisions to pivot on board game path style and make minor changes to the game cards, AED, and manikin to increase comprehension. The team met with vendors to discuss prototype cost and finalize the materiality of the kit’s different elements. Much of the refinement phase was spent designing and finalizing the graphics for all of the components. In the final stages of the project, time was spent working on and finalizing the prototype.

Key Benefits:

01. Disabled learners will have a better and easier experience learning CPR.
02. The gamified approach will make it more enjoyable than traditional CPR classes.



Remixed Concept process



Prototypes of the 3 Concepts for User Testing



Where is it now?

The toolkit will go through user testing and then will either be licensed out or self-published.