**HANDLED!**

**Designer |** Zoe Logan  
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**Design Process**

Design for disability is woefully underdeveloped especially in areas where small changes can make big impact on individuals.

Handled! are a set of assistive kitchen tools to empower differently abled users to have better access to the pleasure of cooking. This series includes a stabilizing cutting board and adaptive modular handles for enhancing existing kitchen utensils.

There are surprisingly few products designed with disability, in mind. Those that are (OXO Good Grips for instance) end up being better for everyone! Using my background in 3D modeling, prototyping and 3D printing and an interest in open-source technology I wanted to create products that used mass-customization models for social and personal good. As a former chef I know the value and pleasure of cooking. Everyone needs to eat, and food prepared at home is statistically more nutritious and can help foster relationships and personal satisfaction.

The intent is to reintroduce kitchen tools to a vast audience who are being ignored or given only medical and infantilizing options. In addition to the 3 million people in the US who have a disability in the hands and/or forearm, Arthritis alone affects over 310 million people, reducing digital function and strength and therefore limiting ability. Diseases such as Cerebral Palsy, Stroke and Diabetes have a major impact on agility, strength and mobility, which affects the everyday process of preparing food (*see reference below).

I want to use cutting-edge design and fabrication approaches on products that treat accessibility as an exciting challenge, not an afterthought.

Handled! Was my graduate thesis project at the Interactive Telecommunications Program (ITP) at NYU. I was awarded the NYU Polytechnic school of Engineering "Ability Lab" Design Grant for $3,400 which was used for user-testing and prototyping. I was also a pilot fellow for the “Regenerative Entrepreneurship” Program awarded by Etsy.org (now the “Good Work Institute” - goodworkinstitute.org). I am still trying to find the right market and home for this project while I work as Lead Designer at EdLab, an education innovation lab at Teachers College at Columbia University.

Handled! wants to make the joy of cooking available to everyone.

These are user-informed, non-medical interventions to help people with a range of limitations access in the kitchen and beyond.

The handles are heat and food safe cast silicone that are designed to be used with one’s existing kitchen tools such as spatulas, stirring spoons, serving implements and more. They come in three basic shapes that can be used alone or combined according to the needs of the user. They are designed to live on the tools but are not prohibitive to normally-abled users. Their soft yet grippy texture is good for anyone! They also allow a user to introduce a relatively small intervention onto their existing kitchen tool collection which means a new disability does not require all new products!

The cutting board uses a mechanical arm as well as more traditional pinioning elements to stabilize food while it is cut or peeled. It can be disassembled in order to be cleaned and stored and has a collection of options according to differently shaped foods. This was designed for people with unilateral disability such as amputation, paralysis or just someone who’s using one hand to hold a child, a recipe book or a phone!

I user-tested these products with 10 disabled or occupational therapy professional collaborators and also got feedback from a non-disability design audience at the Interactive Telecommunications Program at NYU. The response was positive, mostly because it’s a very under-served market and there are very few options for people who live with limitation. The products were most useful for people with difficulty grasping standard kitchen tools such as spatulas, stirring and serving utensils and who experience pain in their joints from certain motions. These products alleviated stress on joints in the hand and wrist allowing for better, safer stirring and flipping of food. The cutting board was most effective with people with unilateral (one-sided) used of their bodies to stabilize food for cutting and peeling which constitutes a vast percentage of our cuisine. This is still a work in progress and there are more improvements on the design to make sure audiences get the best, safest product.

I tried to pay special attention to design things that truly work and are beautiful enough to be proud of and display in the home.
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Visual Presentation
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