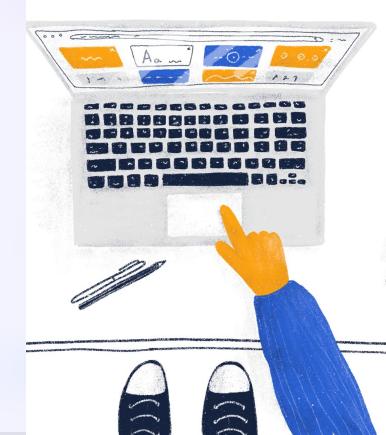# UX Research Case Study

Transitioning real-world simplicity to the digital realm can be unexpectedly challenging. We discovered students unfamiliar with paper flashcards, so we simplified interactions, clarified instructions, and labels. This is a case study focusing on the use of digital flashcards to enhance vocabulary.

by Heather Crombie

Designing Flash Cards and Challenging Assumptions

Our component design team needed to update flashcards for students in grades 5-12 to use for learning new vocabulary words. We used an iterative design & research process.

Background & Project Info

Component Design Team

Our schools were demanding that we update the cards as students hadn't been able to use our prior cards for many years. We were moving the cards into HTML 5.

Project Scope

The intent was to take advantage of HTML 5's features and we had time to iterate as they weren't expected for several months.

Research Conducted

We conducted remote usability sessions and a co-design session to understand what was working and what wasn't in the design process.

Research Objectives & Methodology

① **Our Goals** 🎯

Our objective was to identify the pain points in the designs and iterate until we were certain students enjoyed using the cards.

② **Methodology** 🔍

We conducted qualitative research comprised of remote observation and interviews as well as an in-person co-design sessions.

Findings & Insights

Unfamiliar Mental Model

It became clear in the codesign sessions that students were unfamiliar with the concept of a paper card-based flash-card. This had unexpected implications.
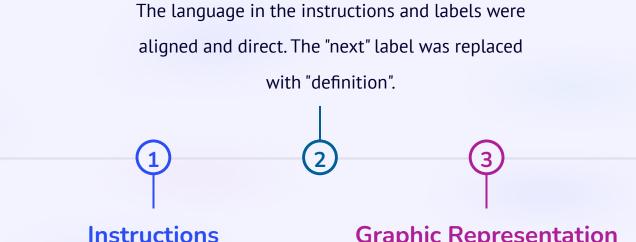
Instructions

Students didn't know what to expect & the instructions were too abstract and didn't explain the process of using a flash card.

Labeling

The label used to reveal the definition for the word didn't support the mental model of a flashcard.

Unnecessary Graphics

Iconographic imagery was confused for functionality and didn't support the task or content.

Recommendations & Solutions

Labeling

The language in the instructions and labels were aligned and direct. The "next" label was replaced with "definition".

① ② ③

Instructions

The instructions were made more prominent and written to clarify the goals and process for using the flash cards.

Graphic Representation

Iconographic images that didn't support the functionality of the cards were removed.

Implementation & Conclusion

I worked closely with the designer and the component builder in all iterations.

Our UX research revealed a surprising assumption made by everyone on the team. We regrouped and redesigned the cards in order to teach students a learning technique we'd assumed they already knew. The flash card component is now one of our more popular components in the content system.