

Professor Garfield & Center for EMDD

Working with professional partners to solve real world problems

Project Goal

Reenvision the Professor Garfield content and organizational architecture to position the site as the leading voice in digital literacy education.

The Problem

Literacy is traditionally understood as the ability to read and write. However, in recent years, the dialogue about literacy education has evolved. In the information age, digital skills are central to being successful in our highly connected Internet society. Therefore, the notion of literacy has expanded to include the successful use of digital tools for meaning making and collaboration in online environments. Today, technology use in the classroom remains primitive. Most apps simply replicate the function of paper worksheets on a touch screen. This does not teach children to think critically or creatively when engaging with the technology.

Professor Garfield

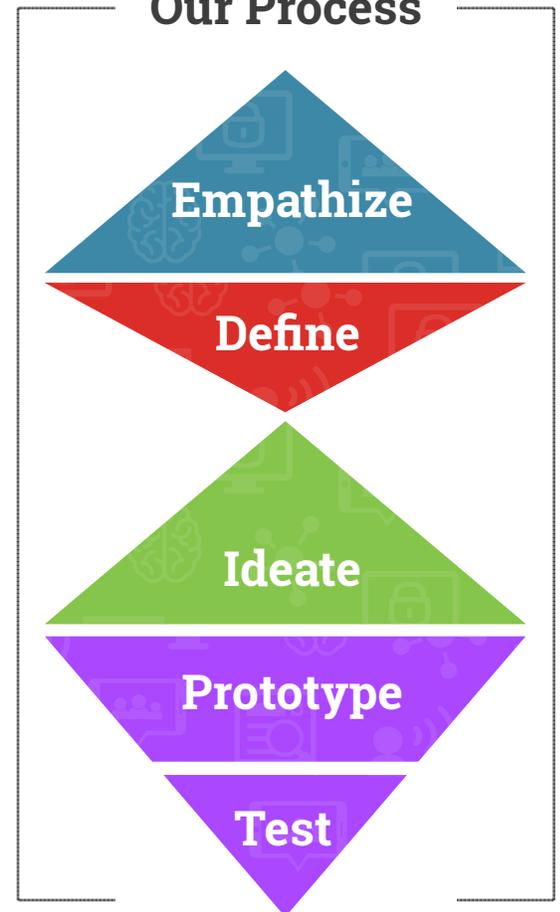
In its current iteration, the Professor Garfield website faces several problems. First, the website was constructed using Flash, which currently does not operate on mobile devices and some web browsers. More pressingly, the website lacks a unified vision, is cluttered with content and is not user friendly.

Co-Creating Solutions

Using the tools taught in EMDD, students underwent a five-step process to tackle this challenge. First, our Garfield team led brainstorming sessions while conducting parallel research that would help them empathize with teachers and generate ideas. After defining the project goal, the ideas were rapidly prototyped and put in the hands of teachers. The ideas that tested positively continued to evolve. This led to the development of our first prototype. (see right). By involving teachers in the design process, their interest in the website and digital literacy education continued to grow because they felt a sense of ownership as they saw their ideas transform from thought to reality.

As this multi-year project advances, students will continue to engage in the design thinking process to create digital literacy activities and develop a new teacher-friendly Professor Garfield.

Our Process



Professor Garfield & Center for EMDD

Year 1: Creating a Framework

Empathize+ Define

The team spent six weeks conducting academic and ethnographic research. First, the team learned about digital literacy and developed six components to define it. Through surveys and focus groups with teachers, a major stakeholder, the team was able to identify key findings that would define the project moving forward.

Ideation

The project team conducted multiple brainstorming sessions with pre-service and in-service teachers. Ideation helped the team identify the features Elementary school teacher's required when using an online learning platform. Out of the ideation process, the team developed a framework for the project.

Prototype + Testing

To test the framework and feature set, several paper prototypes were developed and put into the hands of elementary school teachers. Rapid prototype testing allowed the team to evolve the project to meet the project and stakeholder requirements.

Year 2: Fostering Digital Literacy

Ideation

With an established framework, the team focused on creating activities that foster digital literacy while remaining fun and engaging for children. To create as many ideas as possible, the team held weekly brainstorming sessions with twenty Elementary Education majors at Ball State University.

Moving forward, the team will continue to participate in brainstorming sessions with in-service teachers from Muncie, Indianapolis, Chicago, and Charlotte public schools.



Framework

Play

Students play an existing PGF module updated in HTML.

Create

Students create content that teaches them digital literacy skills

Achieve

Students receive constructive feedback and awards.

Prototype + Testing

The ideas generated from brainstorming will be condensed and sketched out on paper. The digital literacy activities will supplement PGF's Orson's Farm and Knowledge Box. Usability testing with teachers and students will allow the team to identify the top ideas to move into a medium-fidelity state.

Using these prototypes as a proof-of-concept, the team will apply for a Digital Humanities Advancement Grant.