



Ruth Washburn
COOPERATIVE NURSERY SCHOOL

Website Redesign

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RWCNS Website Redesign:

a user-centered website design

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Undergraduate Capstone Project Documentation
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Bachelor of Design in Digital Multimedia Design



PennState

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Project Overview

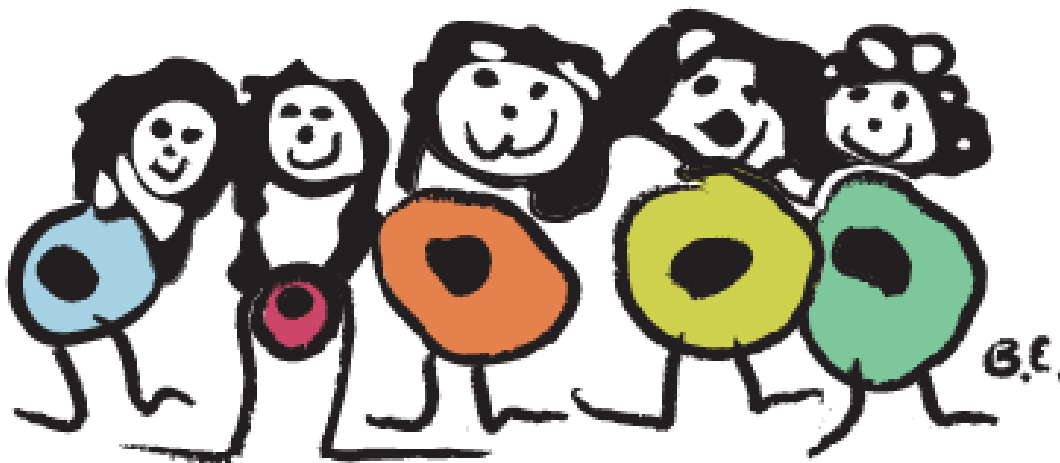
This project is an updated website design for Ruth Washburn Cooperative Nursery School (RWCNS), a private preschool in Colorado Springs, CO. The purpose of the redesign is to use a human-centered approach to improve the experience of visiting the site.

The initial phase of the project included extensive user and competitor research. The research was distilled into five insights: modernize the visual design, increase accessibility, expand use case scenarios, re-map the site architecture, and improve the mobile responsiveness. The research insights were translated into wireframes using a mobile-first design methodology.

To modernize the site's graphic design, I used the hand-drawn shapes from the logo throughout the site in different combinations to draw the viewer's eye down the page. Additionally, I conducted a series of photoshoots to provide all new images for the updated site.

The new design includes better contrast for increased accessibility, simple text and images that quickly communicate ideas to the user, and updated architecture that groups content based on use cases. Finally, testing was conducted to gather user feedback. The feedback was incorporated into the final version of the design.

The final website design is ready to hand off to developers and provides the client with a modern, updated visual design that addresses all current customer needs.



Concept Development

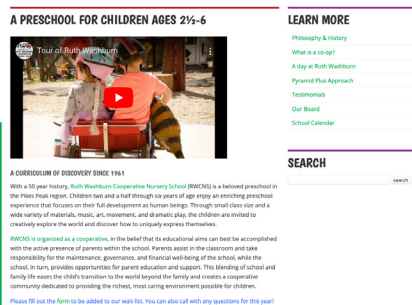
During the concept development of this project, I explored user-centered experiences for school websites, modern web design trends, and options for creating a custom WordPress template for the school. Ultimately, I focused on building a complete end-to-end experience for all potential site users and modernizing the graphics of the site.

The existing site design is over ten years old and is missing content, such as pages for donations, sponsorships, current families, and teacher resources. It includes dense, repetitive paragraphs and a confusing site architecture, which add up to an unfriendly user experience. The site was developed with a bare bones mobile version for smaller screen sizes which results in users not being able to access key information from a mobile device.

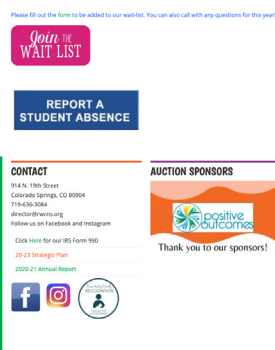
The graphic design of the site needed a complete overhaul to match current user interface (UI) industry standards and the organization's current branding. Over the years, school staff added content and UI elements to the site without following a style guide. The result is a muddled, inconsistent visual style that uses inaccessible color combinations. Elevating the design to bring it up to professional-level standards was a primary goal.



The square logo on the site's main landing page creates awkward space in the header. The lack of responsiveness to larger screen sizes creates huge margins on the sides of content.



The main landing page included a 20-minute video and a large section of dense text. A secondary navigation menu targeting three different users is confusing.



The buttons for "Join the waitlist" and "Report a student absence" don't align with the rest of the site's visual style.

Research

Notable UX/UI Designer Resources

Nielsen Norman Group

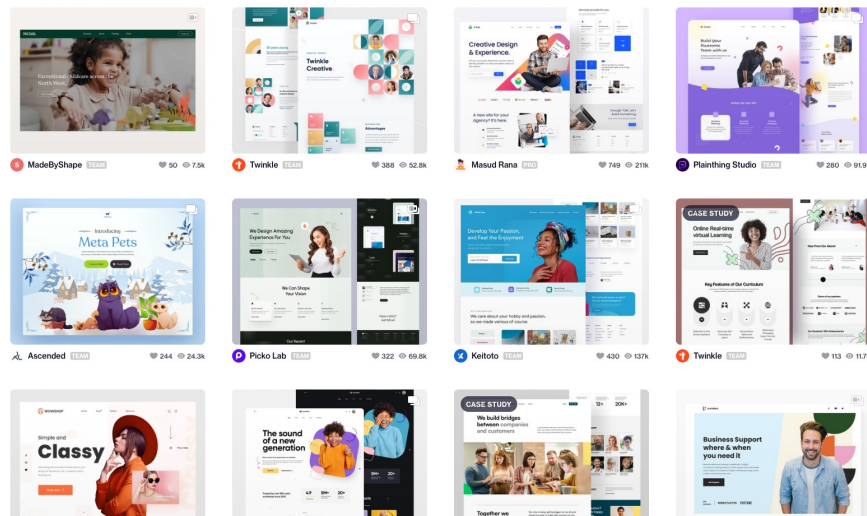
Nielsen Norman Group (NN/g) is a user experience (UX) research and consulting firm that provides insight into user preferences for all aspects of web design. Articles on their website provided design guidance for many areas of the site redesign.

“Pay attention to what users do, not what they say.”

— Jakob Nielsen —

Inspiration Sites

Web design inspiration sites, like Dribbble, provided insight into current UX/UI trends.



Learn UI Design

The online resource Learn UI Design, by designer Erik Kennedy, helped me to understand the rules and trends of modern UI.



Market Forces

The primary target market for the website are members of the Colorado Springs community who interact with the school:

- prospective, current, and alumni families
- prospective and current teachers
- prospective and current business sponsors

The project stakeholders include the site's potential users, listed above, and the school's administrative staff and Board of Governors.

Context

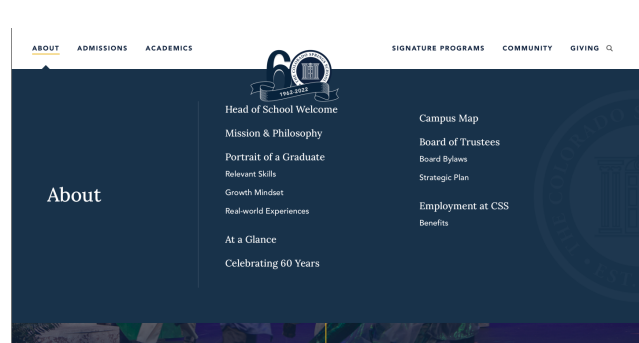
The historical and contemporary issues related to the field include accessibility and responsive design. Both of these issues are critical elements to get right with the RWCNS design. The current site's font choices and color combinations do not pass web accessibility contrast guidelines and are difficult for vision-impaired users to see.

The majority of the site's users are on a mobile device, yet the current site is not responsive. Instead, there is a limited mobile version that prevents users from accessing critical content.

In order for the redesign to meet the goal of a modern design, it must be accessible and responsive.

Inspiration

I was inspired by two websites for educational institutions: [The Colorado Springs School](#), a private preparatory school, and [Penn State](#). The Colorado Springs School's website served as inspiration for site architecture, site-specific photography, and the megamenu.



Penn State's site inspired the blurbs and mobile menu structure for my capstone project.



Production

Current Site Research

I kicked off the project by conducting research on the current site's content and design. A content audit allowed me to catalog and understand each piece of information that is on the current site, its shortcomings and opportunities for improvement. Including all information from the existing site into the new design was important to the RWCNS Executive Director (ED).

[View the full content audit](#)

I evaluated the site using Nielsen's 10 Usability Heuristics and found three areas that needed work: consistency and standards, recognition rather than recall, and aesthetic and minimalist design.

[View the full assessment of Nielsen's heuristics](#)

User Research

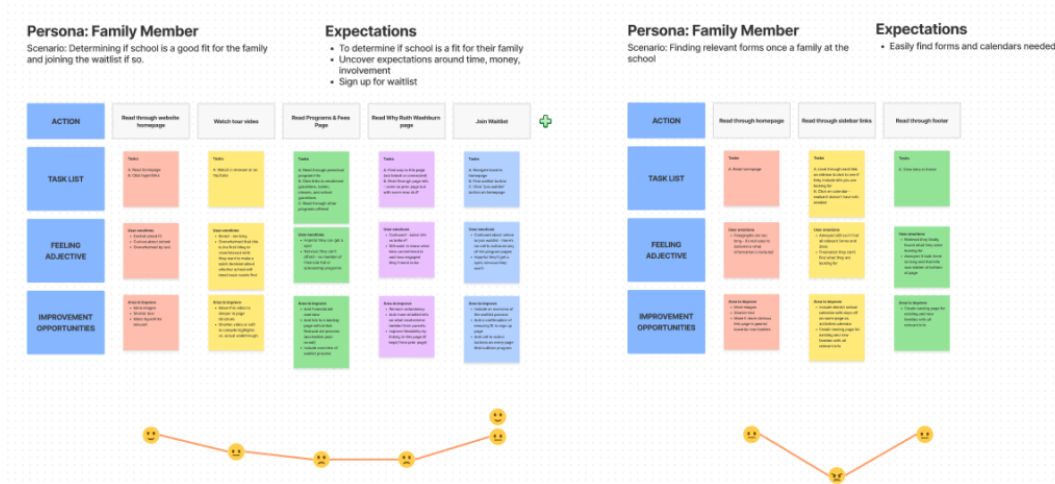
To learn what users will need from an updated site, I conducted a web survey of current and former stakeholders that included a mixture of quantitative and qualitative data. I coded the responses to obtain high-level insights. I interviewed all three administrative staff: the ED, the Educational Director, and the Front Office Manager. They provided critical insight into what information is lacking on the site that drives calls into the school.

Data from the surveys, interviews, and site research informed the creation of user

personas and customer journey maps.

[View the personas](#)

[View the customer journey maps](#)



Competitive Research

I analyzed 15 competitor sites to uncover UX best practices in the early childhood education field. I used this information to understand the competitive whitespace in which RWCNS operates.



Key Insights

From the site, user, and competitor research, I compiled five key insights to drive the new design.

- **Modernize designs** to update the site to modern design standards.
- **Increase accessibility** to ensure site meets all WCAG accessibility criteria.
- **Expand use case scenarios** to capture additional user groups and needed functionality.
- **Group content in the appropriate context** by re-mapping the site architecture to align with user flows.
- **Make the mobile site a responsive copy** to avoid exclusion of information through user's primary access point.

Visual Design

The visual design changed the most over the course of the project. I began by producing multiple style tiles for the client. The early choices are quite different than where the site ended up. The below pictures show the evolution of the design choices.



the initial style three style tiles provided to client



the initial style tile design the client chose



final homepage design

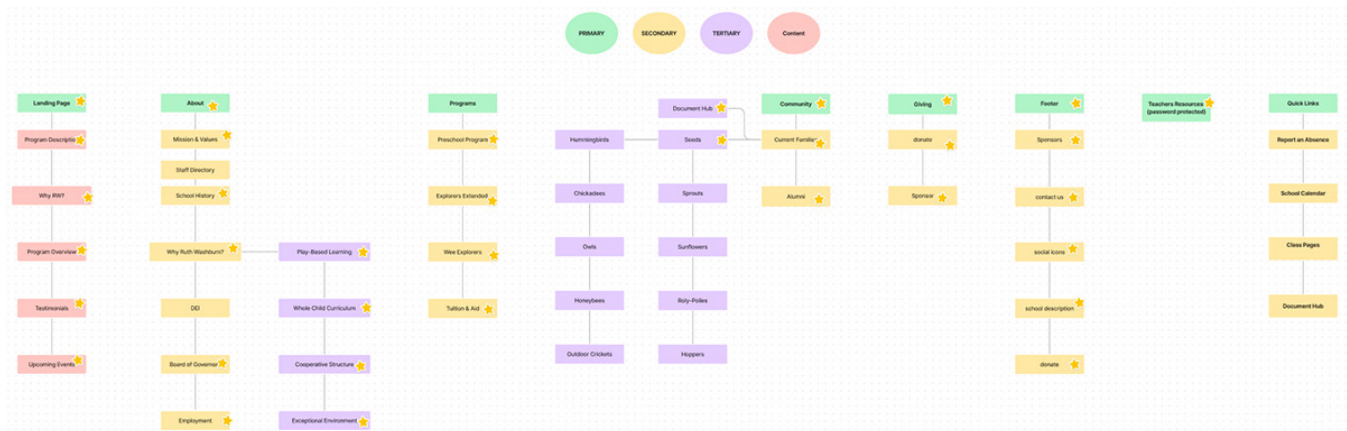
Information Architecture

The existing site's architecture had major challenges that impacted the experience. Content was not grouped by user, so many users had difficulty finding the content they needed because it was buried in other parts of the site. Since I was adding a significant amount of new content for additional users, the entire sitemap needed to be re-imagined. I began the process by conducting a card sorting activity with potential users of the site.



With organizational ideas from these users, I built an updated sitemap in Figma.

[View the new sitemap](#)



Initial Sketches

Armed with all of the research and ideas collected thus far, I began to sketch out initial design ideas and run them by the stakeholders.

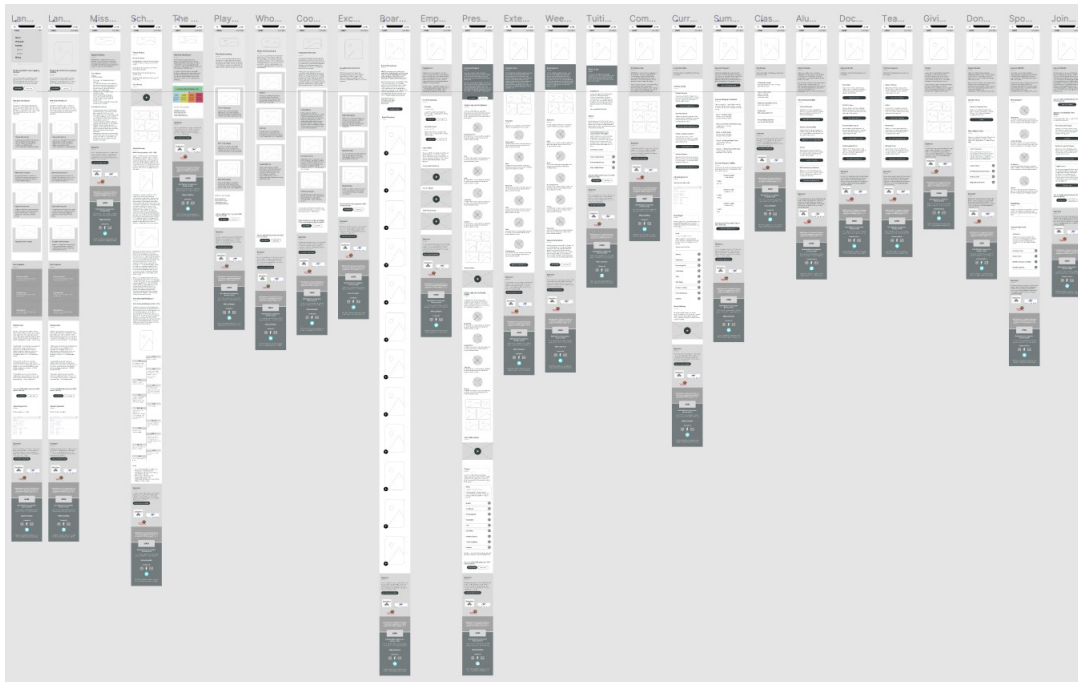
The sketches are organized as follows:

- Row 1:**
 - Sketch 1: Header, Logo, CTA, Programs. Annotation: "floating side buttons for email, call".
 - Sketch 2: Logo, wide-scale image, CTA buttons. Annotations: "Wide Scale img", "grounds?", "classes?", "outdoor space?".
 - Sketch 3: Logo, CTA, Programs. Annotation: "img full background or video?".
- Row 2:**
 - Sketch 4: CTA, Programs. Annotation: "img + geo metric background".
 - Sketch 5: CTA, Programs, icons. Annotation: "Cutoff img".
 - Sketch 6: Logo, menu1, menu2, menu3, menu4. Annotations: "Join waitlist", "Logo", "menu1", "menu2", "menu3", "menu4".
- Row 3:**
 - Sketch 7: Programs, Preschool, Afternoon Explorers, Wee Explorers, Summer Program.
 - Sketch 8: Programs, Preschool, Afternoon Explorers, Wee Explorers, Summer Camp.
 - Sketch 9: Why RW? Header, , .
- Row 4:**
 - Sketch 10: Why RW? R1, R2, R3, R4.
 - Sketch 11: Why RW? , , .
 - Sketch 12: About Programs, Logo, Mission + Philosophy, Board of Governors, History. Annotations: "Mega Menu", "Secondary + Tertiary".
- Row 5:**
 - Sketch 13: Logo, About Programs, Mission, History, Board, Rol Name. Annotation: "Drop down menu", "Secondary".

Mobile Wireframes

The organization says 60% of their users access the site via mobile. I used a mobile-first design methodology for the wireframes and mapped out the site at mobile sizes first.

[View full mobile wireframes](#)

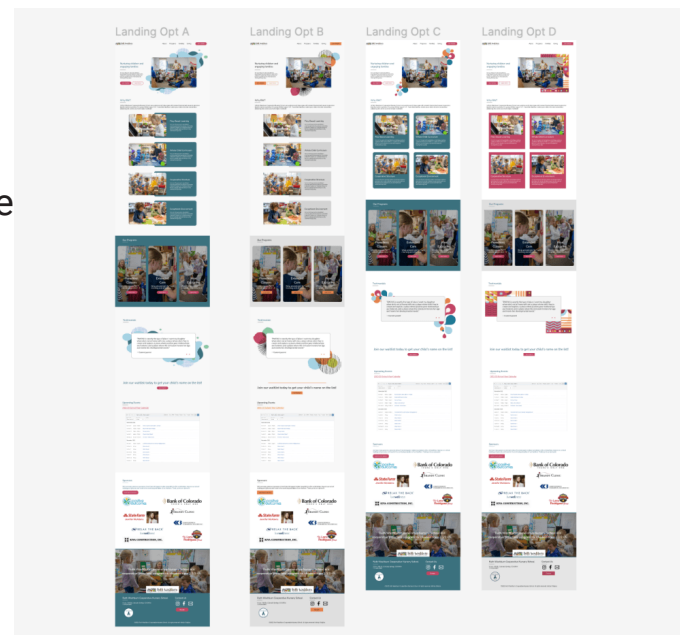


Prototype Design

Landing Page Design Options

For the website graphic design, I decided to incorporate abstract shapes throughout the site. I provided the client with multiple landing page design choices, to get a sense of their preferences.

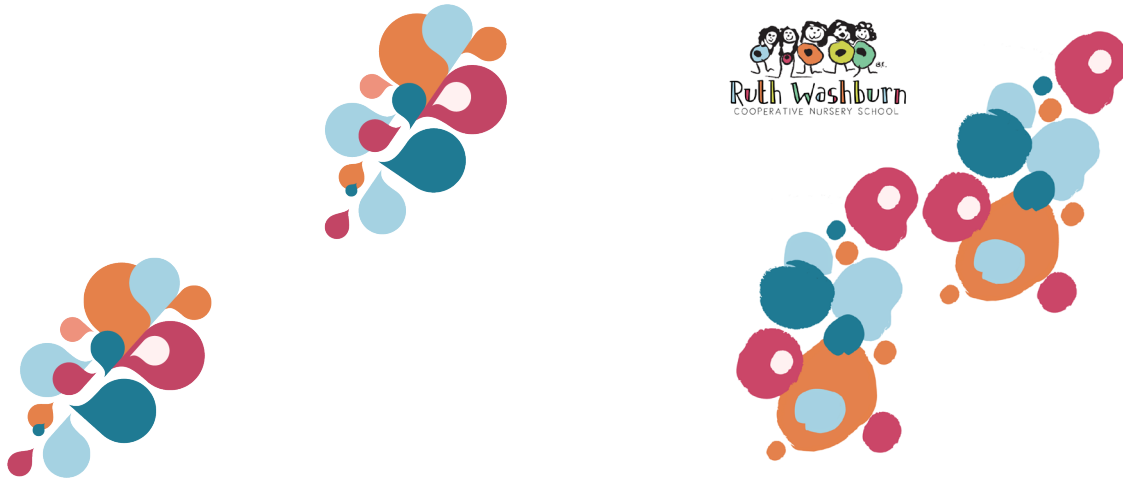
While this gave me an understanding of what visual style they liked, there was still an opportunity to further develop the design and make it unique to the school.



Custom Abstract Art

The school liked a design found on Adobe Stock, but the smooth shapes felt a little incongruous with the school's logo, which had a more freeform, hand-drawn feel to it.

I decided to riff off of this design and use the belly shapes from the hand-drawn logo in a similar pattern design. The organic, freeform shapes tie in nicely with the school's logo.



Photography

The school didn't have much photography that was a good quality to use, so I did three photoshoots and shot over 600 pictures. The entire site, except for three pictures, features photography from my personal archive or one of these photoshoots.



Site Copy

I wrote all of the copy for the site. I interviewed administrative staff to learn the salient information to communicate and summarized the key points.

Prototypes

After planning out the site's wireframes as a mobile experience, I wanted to make sure I could translate the mobile design to a full webpage layout, so I created the full color prototypes in full webpage size. I translated the homepage design to mobile size as well.

[View webpage prototype](#)

[View mobile homepage prototype](#)

User Testing

I tested the prototypes with three users to gather feedback on the designs. I used the testing process outlined in the book *Rocket Surgery Made Easy* by Steve Krug. Below are the key insights from testing.

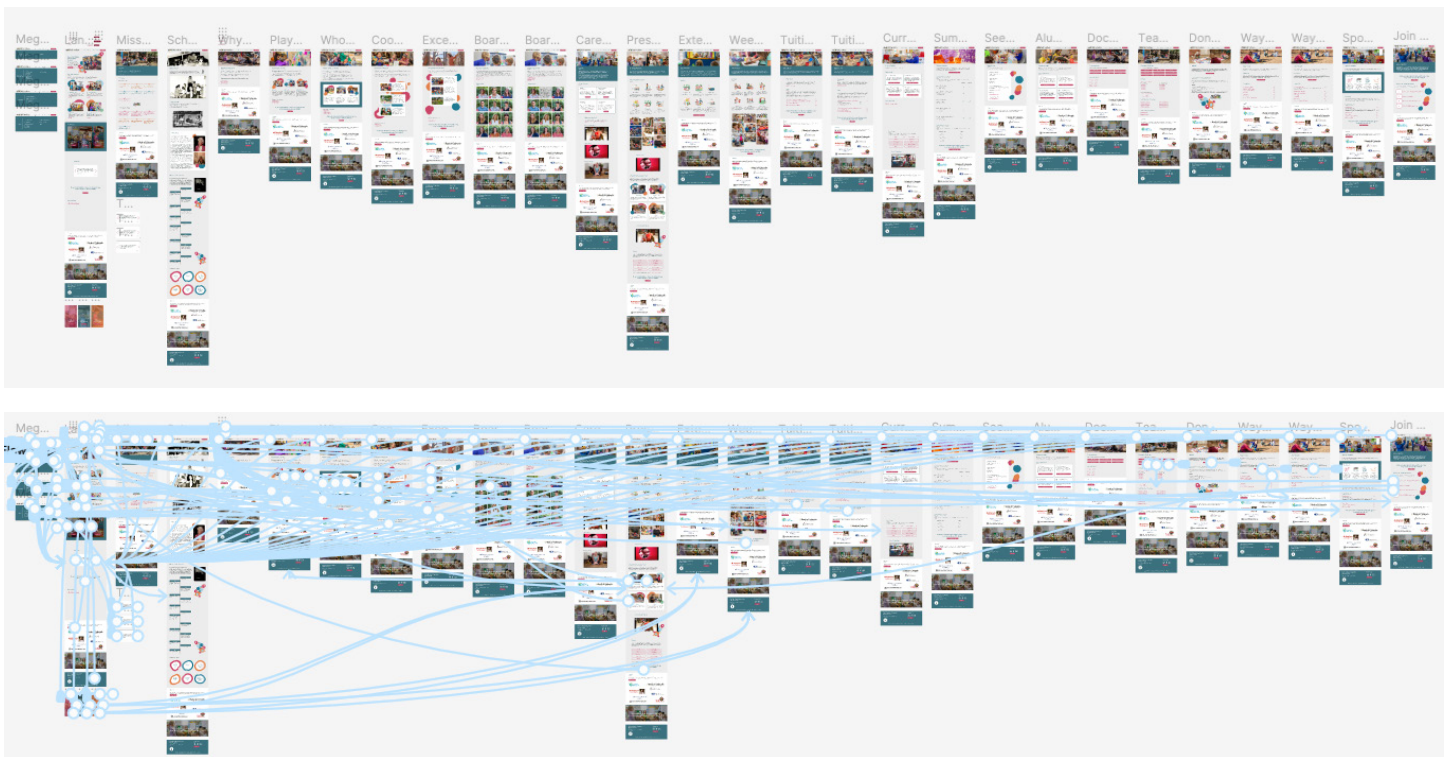
- Update homepage to make it obvious you scroll down for more content.
- Add more maskless pictures to the homepage to better see children's faces.
- Add better information around how the point system works for enrollment decisions.

Conclusion

The results of this capstone project are the delivery of a modern, user-centric website design for RWCNS. The design includes a full color prototype of 24 web pages, each with custom photography, updated copy, and a consistent visual style. The design is ready to be handed off to developers.

[View webpage prototype](#)

[View mobile homepage prototype](#)



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