

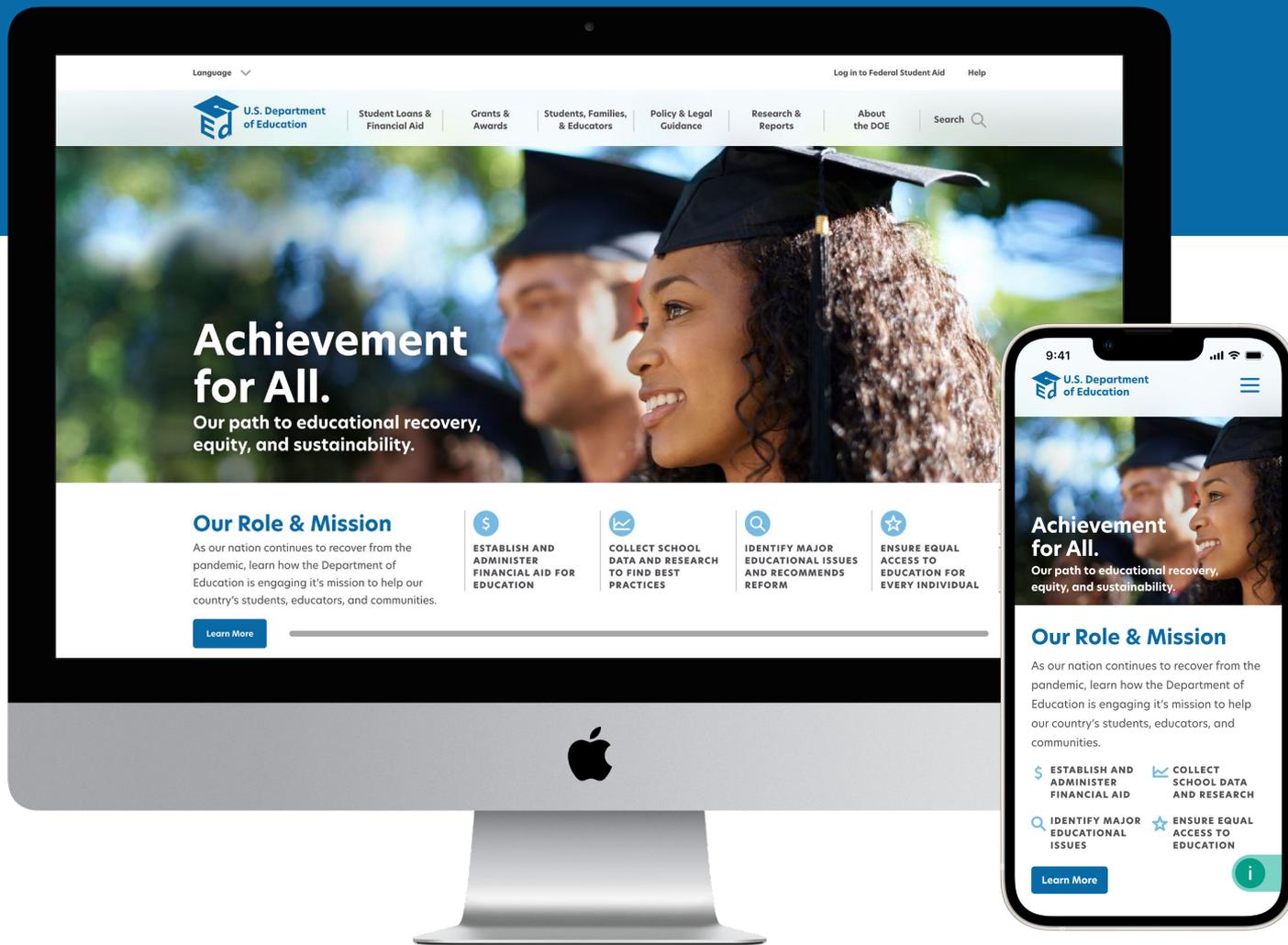
UX/UI CASE STUDY

February 2022

U.S. Department of Education Website Redesign

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UX/UI Designer

Katie Haas
UX Collaborator



Project Overview

The goal of this project was to produce a **reorganized, redesigned and responsive website** for the Department of Education.

- Timeline: 5 weeks
- Role: UX Researcher, UX/UI Designer

To achieve this goal, focus was applied to the following areas:

- UI Analysis & User Research
- Information Architecture
- Lo-Fi Wireframing & Testing
- Hi-Fi Prototyping & UI Styling
- Interactive Design

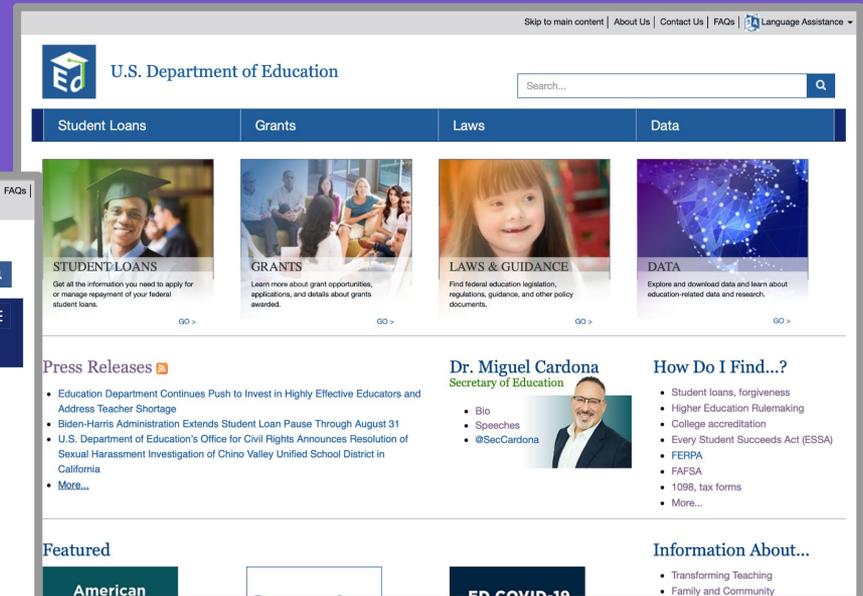


Department of Education Mission Statement

Promote student achievement and preparation for global competitiveness by fostering educational excellence and ensuring equal access.



Current Site



Amy Anderson: our DOE proto persona

To begin this project, we hypothesized on who might be visiting this site.

With the breadth of information on this site, a mother with children in two different grade groups felt like a good potential user.

DOE Proto Persona

Name & Personal Demographics

Name: Amy Anderson

Age: 47

Family / Status:

Married with two children, one middle schooler, one graduating junior

Personality:

Stays organized but flexible with multiple and ever-changing family schedules

Needs & Goals

Needs:

Needs information on future college planning

Goals:

Wants simple, basic information on entering college, so she can craft a custom plan for her high school junior

Behavioral Demographics

Profession:

Full-time Project Manager at Interior Design Studio

Likes:

Spending time with family, family dinners, attending kids' sporting events; volunteers in PTO/A

Dislikes:

Kids' late night homework meltdowns; lack of information from kids about school events



Pain Points & Potential Solutions

Pain Points:

Disorganization with site: Even with higher education herself, she is frustrated with how disorganized this site currently is

Potential Solutions:

With current website, spending more time on site combing through webpages to find pertinent information

Amy may visit the Department of Education website to gather:

- **student loan and potential grant applications,**
- **information on federal college funding, and**
- **information on K–12 education.**

Heuristic evaluation reveals several usability issues

We performed an initial evaluation of the site and rated several heuristic considerations.

Among several navigation issues, we noticed that the lack of content chunking created an overwhelming experience.

Rating: https://docs.google.com/spreadsheets/d/1WL20gwxxkHyGQCDyvrMoEK-81vP-8xLdi8rRgl_qdKDE/edit?usp=sharing

ARP PATHS includes a number of considerations for states as they build capacity for their work to districts and the public. The tool includes six sections that are based on state plan application that all states have submitted, and the Department has approval section, states can indicate the implementation status, describe their states' progress promising practices or impact.

These include topics such as implementing strategies to support safe in-person instruction incorporating ongoing engagement with parents and other stakeholders, addressing meeting urgent staffing needs, and ensuring transparency.

"Since the start of the pandemic, Democrats have worked to put our kids first—that the American Rescue Plan to provide the schools the resources they need to stay of mental health resources, and address learning loss to get our kids back on track after tough two years," said Sen. Patty Murray, chair of the Senate Committee on Health, and Pensions (HELP). "And as the Omicron surge continues, schools continue facing from buying masks to dealing with staff shortages—and it's key they use these resources carefully to meet their communities' urgent needs. I'm monitoring closely to make sure I'm glad this new tool will boost transparency and help schools across the country and keep kids in school safely."

"In response to biggest economic and health crisis our country has ever faced, President Biden and Congress took decisive action through the American Rescue Plan to provide resources for K-12 schools to safely reopen and address the pandemic's impact on academic, mental health, social, and emotional needs," said Rep. Rosa DeLauro, chair of the Appropriations Committee. "I applaud the courageous, essential efforts by educators and district leaders to use these flexible ARP funds."

"States and districts are making historic investments in education through the American Rescue Plan Act," said Allison Crean Davis, director of the National Comprehensive Center, in our role partnering with the Department of Education, we are looking forward to working with the Department to ensure that associated resources and supports to help state and local leaders achieve positive outcomes for school systems and our nation's students."

The Department is working with states to ensure that the American Rescue Plan Act, the Department plans for how they would spend their ARP ESSE allocations in March of last year. To ensure proper use of the remaining one-third of ARP ESSEER December 2021, all 50 states the District of Columbia and their full awards. Links to state and local education agencies are provided.

American Rescue Plan dollars are already being used by states for a variety of purposes, such as staff shortages, and supporting students and school counselors. The ARP PATHS tool will help states track their use of these funds.

Examples of ARP's impact include:

- The Vermont Agency of Education (AOE) is providing support for eligible students. AOE's Vaccine Incentive Program that will make available up to \$100 million for the purchase of 85% or higher. Vermont has achieved a high target of 85% or higher. Vermont has achieved a high target of 85% or higher. Vermont has achieved a high target of 85% or higher. Vermont has achieved a high target of 85% or higher.
- Wake County Schools in North Carolina provided support for keeping schools open.
- Gaston County Schools in North Carolina provided support for keeping schools open.
- White Plains City Schools are using their ARP funds to support their teachers, and make sure student learning is not disrupted.
- Tennessee is using ARP ESSEER funds to provide support for the next three years. When the program is fully operational, it will provide access to 300-500 additional hours of targeted instructional time from the pandemic.
- Using American Rescue Plan funds, Arkansas is providing support for recruitment, preparation, and support for career and technical education instruction or intervention to meet the academic needs of students.

Legislation, regulations, guidance, and other policy documents can be found here for the Every Student Succeeds Act (ESSA), and other topics.

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Please note that in the U.S., the federal role in education is limited. Because of the Tenth Amendment, most education policy is decided at the state and local levels. So, if you have a question about a policy or issue, you may want to check with the relevant organization in your state or school district.

Elementary and Secondary Education Act of 1965 (ESEA), as amended

- Every Student Succeeds Act (ESSA) Information page
- ESEA Flexibility: Information about flexibility from certain No Child Left Behind requirements that ED is offering to states.
- Text of the Elementary and Secondary Education Act of 1965, as amended by ESSA and the National Defense Authorization Act, 2017:
 - Introductory materials — Title I — Title II — Title III — Title IV — Title V — Title VI — Title VII — Title VIII
- Text of No Child Left Behind Act: For certain ESEA programs, the requirements of NCLB apply through the 2016-2017 school year.
- Guidance and Regulations

FERPA (Family Educational Rights and Privacy Act)

- Overview
- Guidance for Students
- Guidance for Parents
- Regulations

The screenshot shows the U.S. Department of Education website. At the top, there is a navigation bar with links for "Skip to main content", "About Us", "Contact Us", "FAQs", and "Language Assistance". Below this is a search bar. The main content area features four large blue navigation tabs: "Student Loans", "Grants", "Laws", and "Data". Under each tab is a corresponding content card with an image and a brief description. For example, the "Student Loans" card features a student in a graduation cap and gown and says "Get all the information you need to apply for or manage repayment of your federal student loans." To the right of the main content area, there is a section for "Press Releases" with a list of recent releases and a profile for "Dr. Miguel Cardona, Secretary of Education". Below that is a "How Do I Find...?" section with a list of topics like "Student loans, forgiveness" and "Higher Education Rulemaking". At the bottom, there are three featured boxes: "American Rescue Plan / Funding for K-12 Schools", "Coronavirus Information", and "ED COVID-19 HANDBOOK".

Information About...

- Transforming Teaching
- Family and Community Engagement
- Early Learning

Information Centers

- Grants & Contracts
- Student Financial Aid
- Research & Statistics
- Policy & Guidance
- Programs

About Us

- Contact Us
- ED Offices
- Jobs
- Press Releases
- FAQs
- Recursos en español
- Student Feedback

Information About...

- Transforming Teaching
- Family and Community Engagement
- Early Learning
- Constitution Day

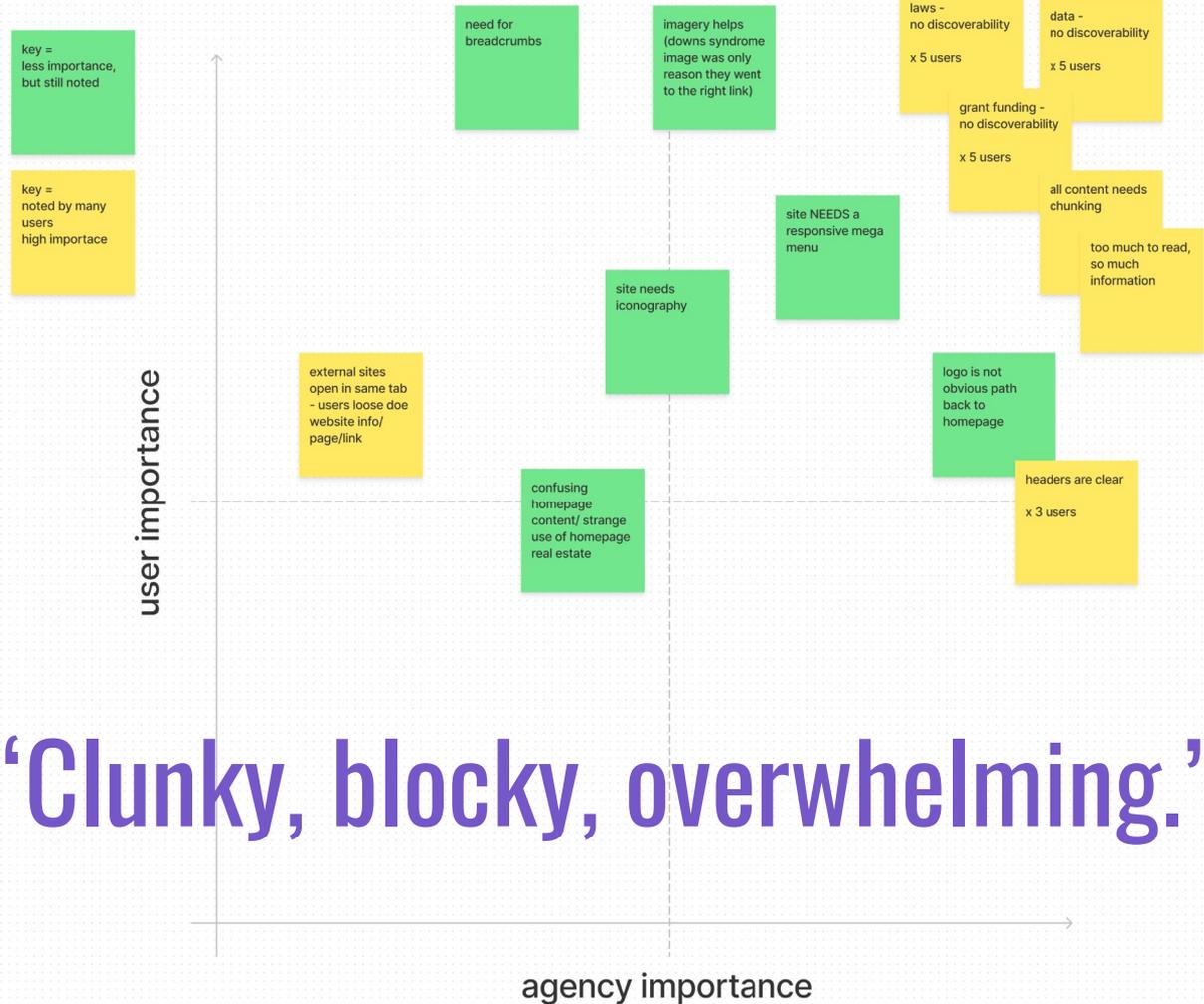
More >

Usability testing on the existing site

We expanded user tasks from those Amy might have completed, to include tasks from all four main tabs on the website.

This gave us more usability insight on the more of the website.

We synthesized our feedback and focused on prioritized issues.



“Clunky, blocky, overwhelming.”

Webpage annotations mapped problems to solve

What we found from our tests validated our initial evaluation, and we annotated these for reference.

- Overall lack of information discoverability
- Link overload
- Uninspiring presentation

View PDF:
<https://drive.google.com/file/d/1ii2xC3HlQ26L2ZGwjTEad0dHBZcIT28Q/view?usp=sharing>

The screenshot shows the U.S. Department of Education homepage with 13 numbered annotations:

- 1**: U.S. Department of Education logo
- 2**: Search bar
- 3**: Navigation menu items: Student Loans, Grants, Laws, Data
- 4**: Student Loans card
- 5**: Grants card
- 6**: Press Releases section
- 7**: Dr. Miguel Cardona Secretary of Education profile
- 8**: How Do I Find...? sidebar
- 9**: Featured section header
- 10**: American Rescue Plan / Funding for K-12 Schools card
- 11**: Coronavirus Information card
- 12**: ED COVID-19 HANDBOOK card
- 13**: Information About... sidebar

Heuristic Evaluation: Home Page

- 1 Consistent Top Navigation**
with way to return Home
- 2 Search**
Easy to find, clear, intuitive location
- 3 Menu items not accessible**
Site needs a responsive mega menu with more and global options
- 4 Lack of Breadcrumbs**
No way to realize current location
- 5 Imagery**
Too small, staged. However, images clearly define link
- 6 H1 Headings**
Clear and bold, easy to find
- 7 Sidebar**
General information could be provided in a global and consistent sidebar
- 8 Links**
Way too many links
- 9 Color Scheme**
Functional but SNOOZEFEST not exciting color palette
- 10 Homepage Content**
bad use of this real estate; there is better content that could be shown that could be much more effective here

Navigation testing: Round 1

To gather more insight on experience within the navigation, we tested on desktop and mobile screens.

The lack of main navigation buildout quickly became a glaring issue.

Without more navigation options readily available, users were not able to complete several simple tasks.

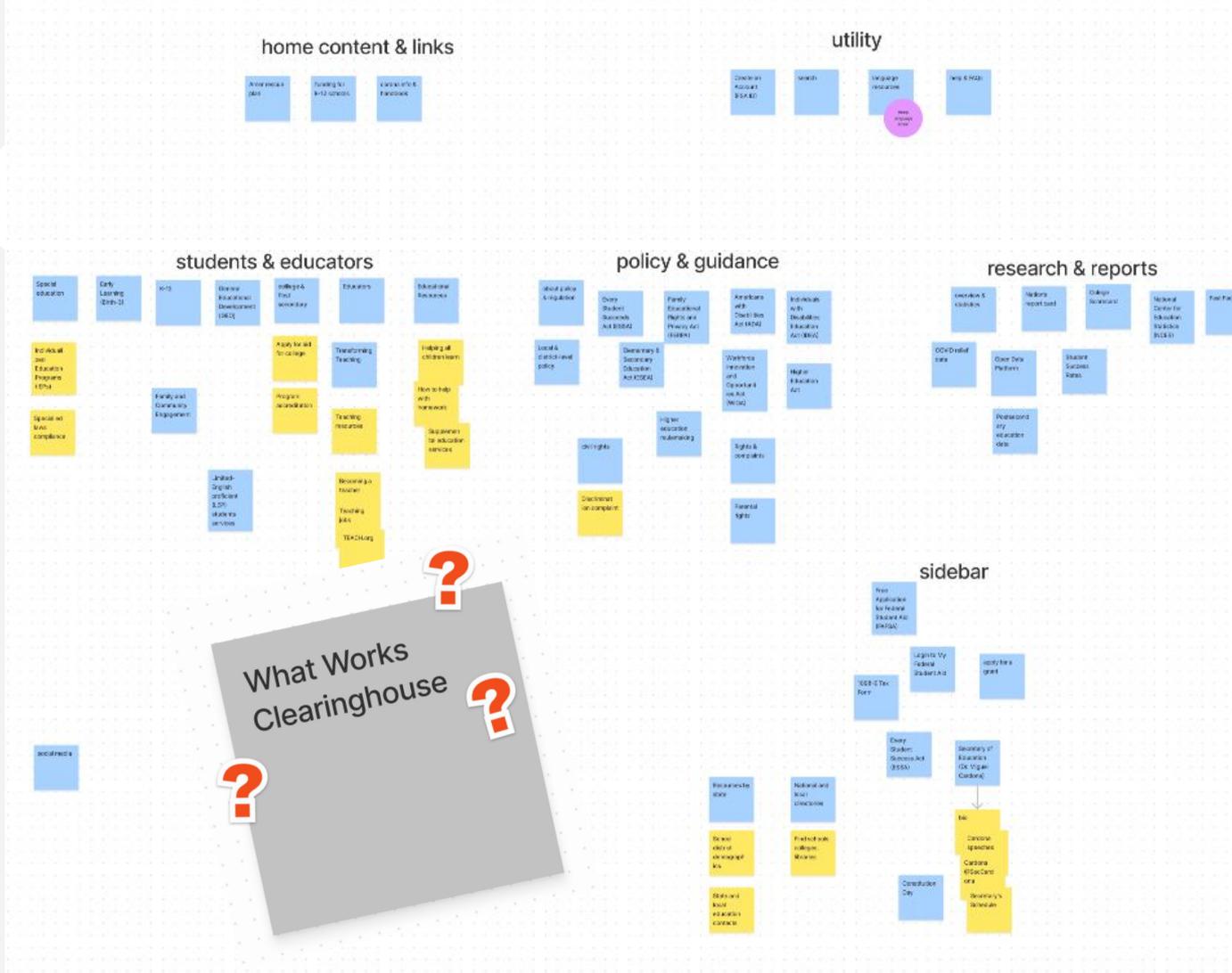
“I just have to look and look and look...
This is an awful website.”
(desktop)

“I can't see a sidebar in this view...”
(mobile)

Intensive card sorting

With so many links and so much jargon, this was an immersive step that required intense rethinking.

I added categories, reworded links, and consolidated content to ease navigation on a new site map.

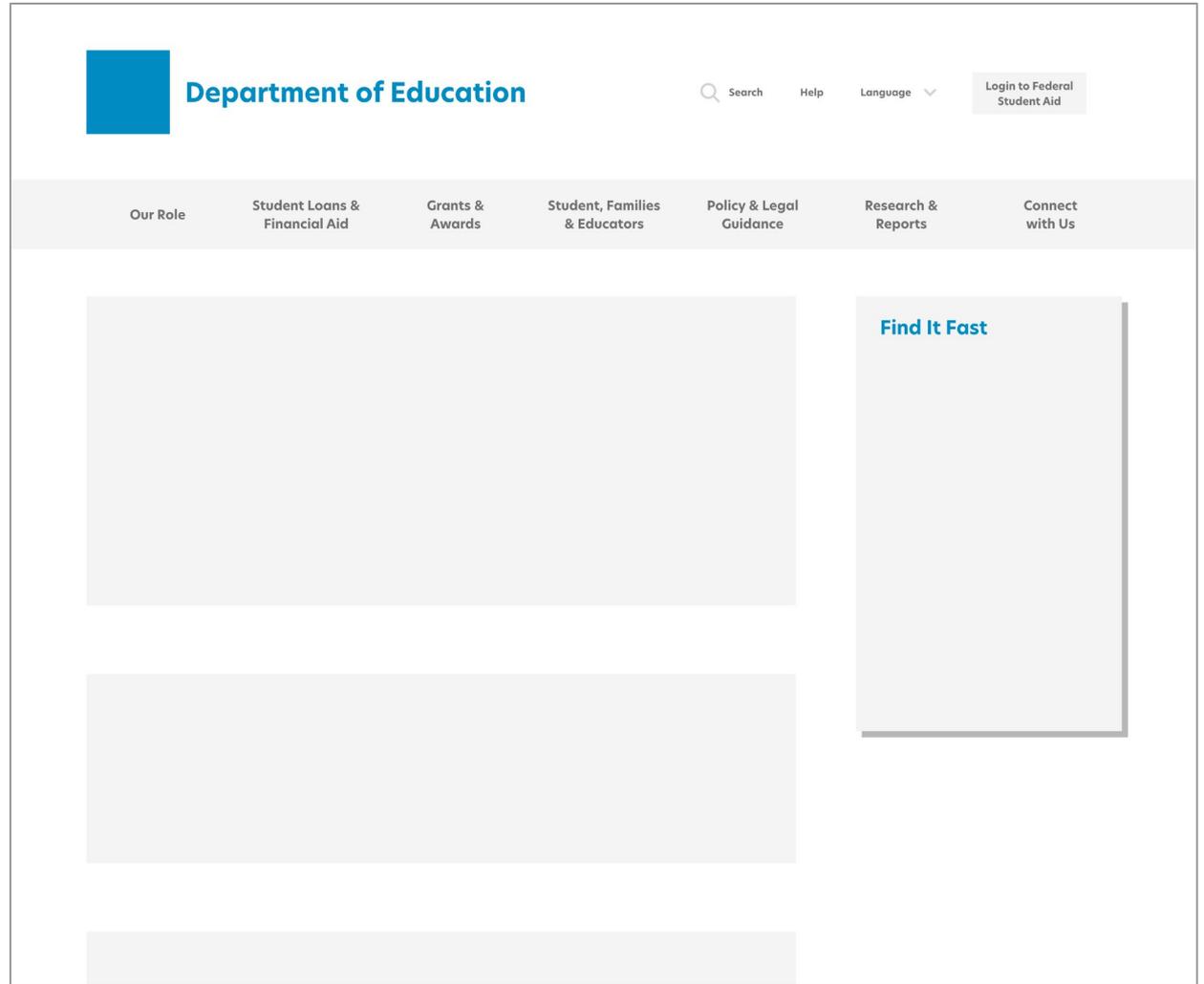


Prototyping a new navigation

With so much information to offer, I prototyped a mega menu for this site.

Each category provides related content with more links upon hover of various options.

Prototype:
<https://xd.adobe.com/view/3409a481-953b-42c0-a096-3d3e51e22e2d-615a/>



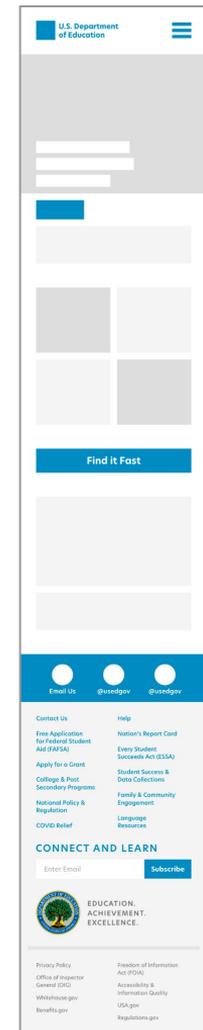
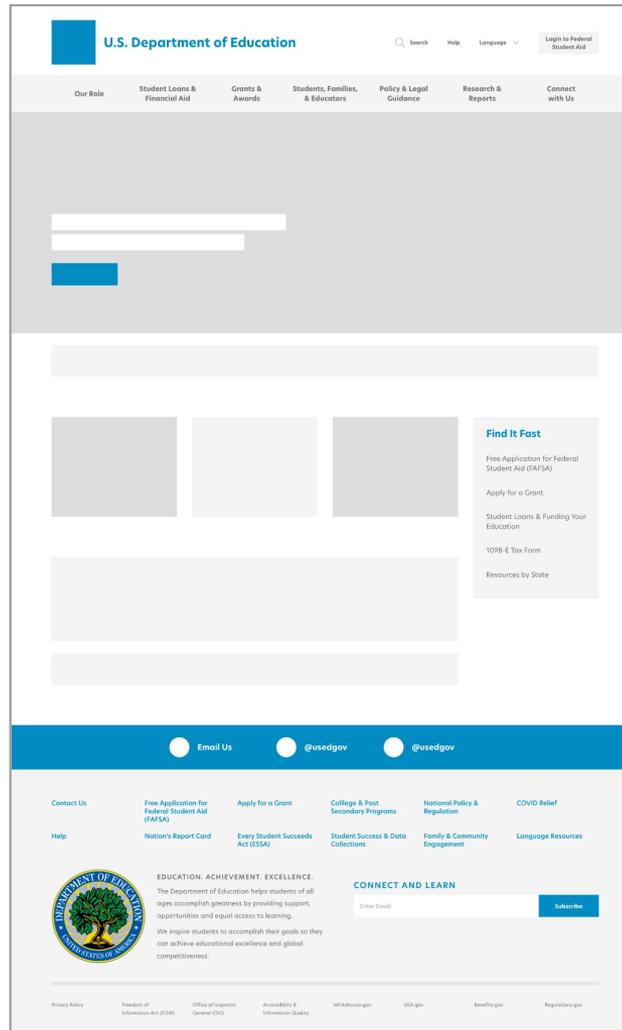
Homepage wireframes

Content chunking was top-of-mind when laying out homepage wireframes.

Regardless of what the content might be, the layout needed to be clear and concise.

View PDFs:

<https://drive.google.com/file/d/1V3umucXzpJt8jm04z2KafE2L0kNgjNcV/view?usp=sharing>



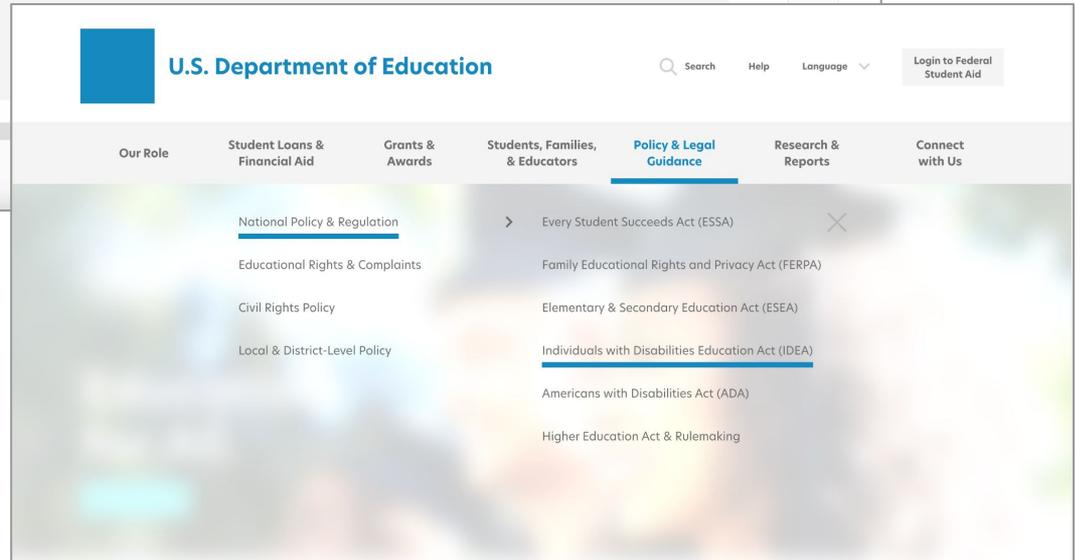
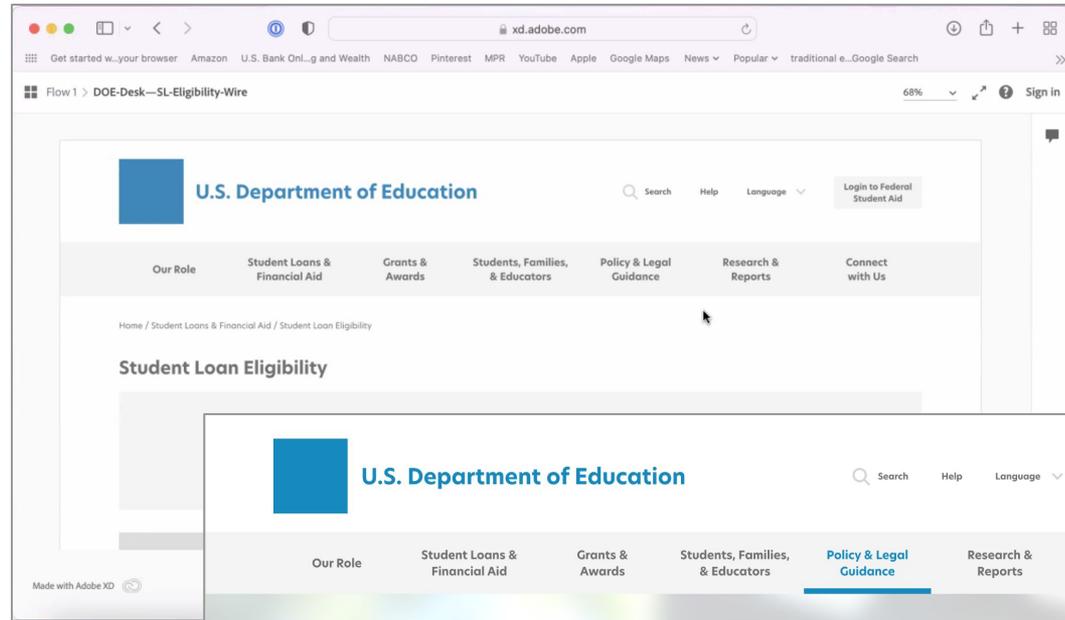
Navigation testing: Round 2

Using the same tasks as the first usability test with the existing site, I measured the organization and usability of my newly overhauled navigation.

I also tested A/B choices on the homepage imagery.

Document:

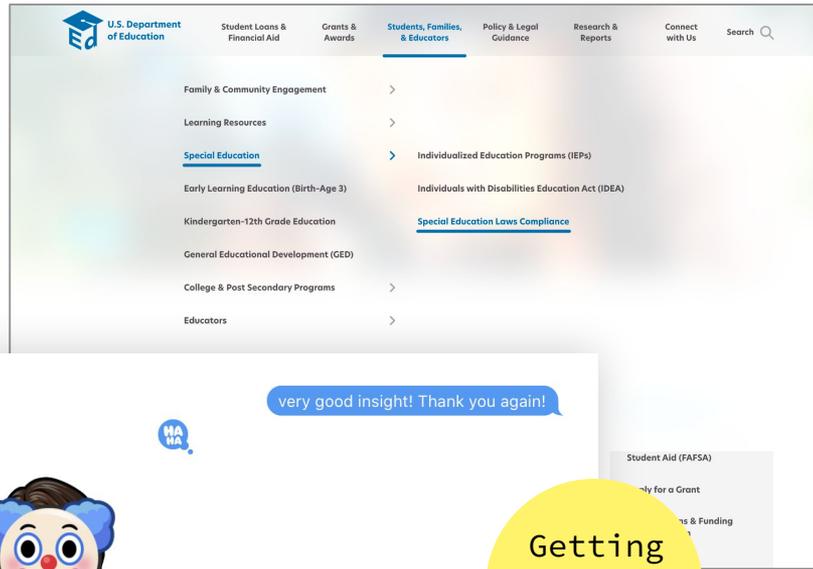
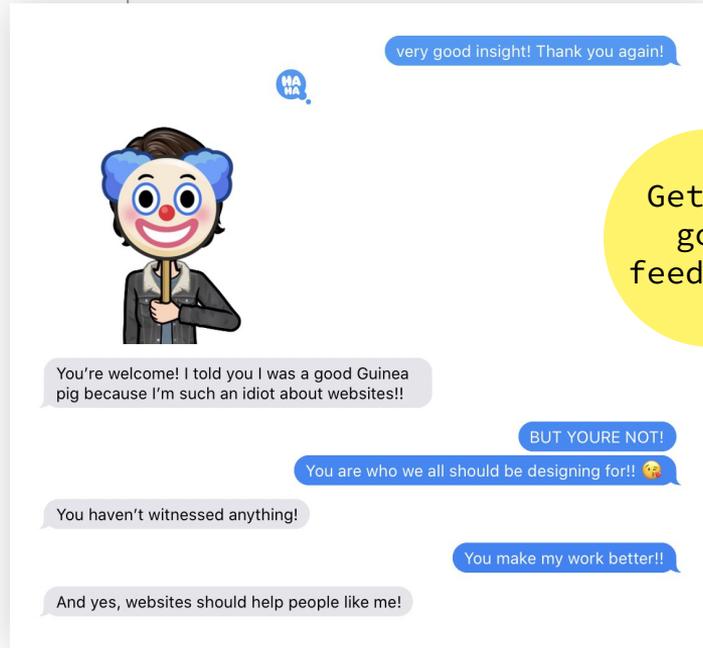
<https://docs.google.com/document/d/14Afo90tsNzQfcT6TQgLkfQlFvyWch70Bf7Mt-GhECH/edit?usp=sharing>



Feedback provides wireframe iterations

Taking the feedback from testing into consideration, I made a few changes.

- Users really liked a **full-screen** frosted background upon hovering over a menu item (desktop) because the dropdown felt very clear and direct.
- Ultimately, I chose to shorten the dropdown background, so the user could hover off of it instead of having to click off of it.



Comprehensive DOE style guide

To refresh this site, I employed bright colors, a legible typeface, and candid imagery.

Extending further, I leaned into values that are currently buried in content, and incorporated these into brand messaging.

View PDF:
<https://drive.google.com/file/d/1IL2H0pnxSSqKL31im5qH5q2LQocta3sdA/view?usp=sharing>

STYLE GUIDE
U.S. Department of Education

Renewed inspiration for this site was found in bright colors and uncropped photography. Elemental shapes and primary and secondary hues reflect the fundamentals and excitement of learning.

COLORS

PRIMARY USE / MAIN COLORS
VIOLET, PERSIAN, MANGO, ECRAVE

SECONDARY USE / ACCENTS
MANGO, ECRAVE, PERSIAN, VIOLET

IMAGERY

TOGETHER WE CAN DO ANYTHING

TYPOGRAPHY

Let's Learn from Each Other
EDUCATION. ACHIEVEMENT. EXCELLENCE. education. achievement. excellence.
The Department of Education helps students of all ages accomplish, grow into, providing support, opportunities, and equal access to learning. This helps students be successful that goals so they can fulfill educational, academic and global competitiveness.

Across the country, we must continue the necessary work of developing a strong, diverse educator workforce for today and tomorrow.
-Secretary DeVos

DESKTOP	DEVICE
Header 1 Bold 45/63	Header 1 Bold 32/45
Header 2 SUPER 32/45	Header 2 SUPER 34/33
Header 3 Bold 28/39	Header 3 Bold 22/31
Header 4 Medium 24/33	Header 4 Medium 20/23
Header 5 SUPER 20/28	Header 5 SUPER 17/24
Header 6 Bold 18/25	Header 6 Bold 16/23
Label EXTRA BOLD 14/13	Label EXTRA BOLD 14/16

FORMS & SEARCH

Form Label: This is a text field where you can type text into a form. This is a text field where you can type text into a form. This is a text field where you can type text into a form. This is a text field where you can type text into a form.

Form Label: This is a field in focused state. This is a field in focused state. This is a field in focused state. This is a field in focused state.

MENUS

EXPANDINGS
Family and Community Engagement

Family and Community Engagement
Family and Community Engagement
Family and Community Engagement
Family and Community Engagement
Family and Community Engagement

ACCORDIAN

Primary Menu Item
Secondary Menu Item
Secondary Menu Item

PROGRESS INDICATION

Step 1 Step 2 Step 3 Step 4

BUTTONS

Primary Button
Secondary Button
Tertiary Button
Quaternary Button

SELECTORS

Radio Button
Checkbox
Toggle
Range

LOCATION NAVIGATION

BREADCRUMB
Home / Success Factors & Outcomes / Individuals with Disabilities Act (IDEA) / State/State

PAGINATION
1 2 3 4 5 24 25 Home

CONTENT GRAPHICS

Supporting text. Here is some supporting text. Here is some great images.

ICONSOGRAPHY

Home, Search, Mail, Phone, Calendar, Location, Document, Print, Refresh, Add, Remove, Checkmark, Close, Arrow, Share, Social Media (Facebook, Twitter, LinkedIn, YouTube, Instagram, Email)

Hi-Fi Webpages Desktop & Mobile

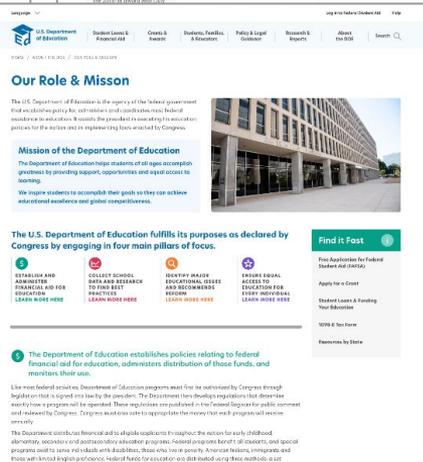
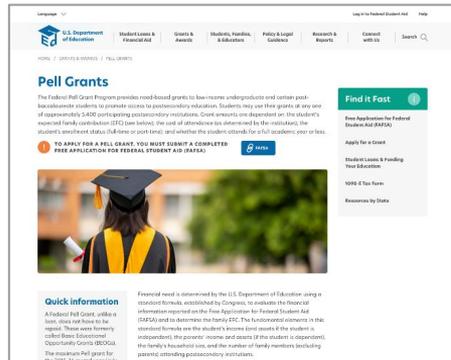
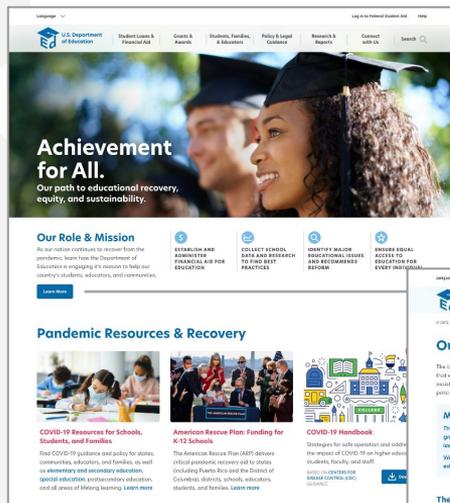
After completing the style guide and accounting for all feedback, I applied newly-defined elements to bring various pages up to hi-fidelity.

View PDFs:
https://drive.google.com/drive/folders/1D9Yvs0ALHP4x7KEiNv_PgTmrounWWYa?usp=s_haring

https://drive.google.com/drive/folders/11H_i10mqatDxTXuWtoiezX-mGieez9NF?usp=s_haring

Features

- Sticky Sidebar (desktop)
- Sticky Navigation (desktop/device)
- This would stick at a certain point, then push up at the bottom of the screen

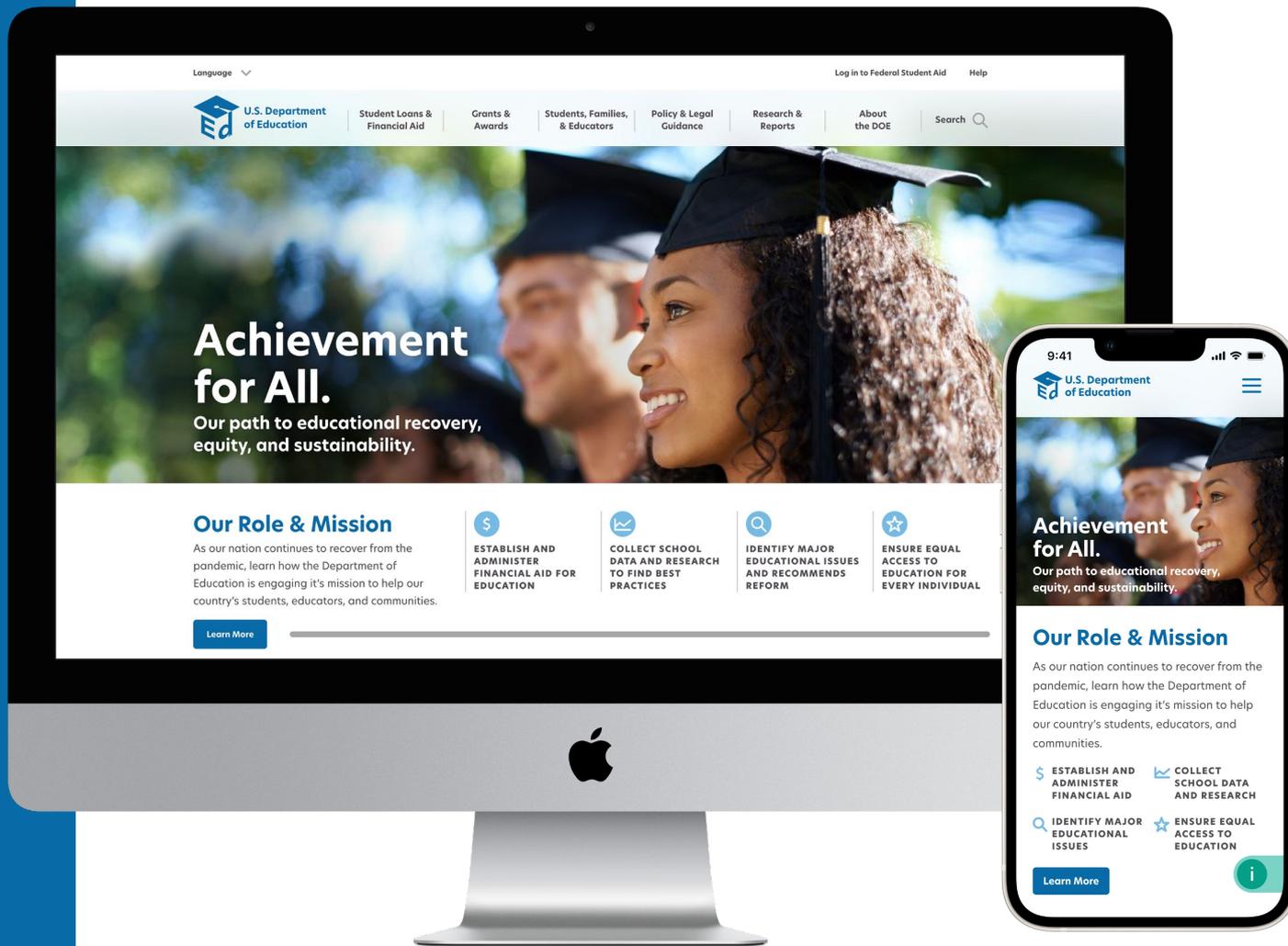


Final Prototypes Desktop & Mobile

With final prototype links connected, the new, responsive Department of Education website was brought to life.

Desktop Prototype:
<https://xd.adobe.com/view/ceeece15-ee31-41ff-a7fd-fabca427864c-9bbd/>

Mobile Prototype:
<https://xd.adobe.com/view/1c70f438-aa7e-4f21-afbc-5130b111f901-4923/>



Conclusion

I learned more about navigation strategies for specific users, as well as **the importance of all types of user testing** for a site this expansive.

Having a **complete library of UI elements** available during the layout process is extremely helpful.

Reflections on Future Improvements

With more time, I would consider the following for improvements on this site:

- **Navigation design** - further optimization of the sticky navigation bars
- **Content and copywriting** - this would need dedicated attention to define and amplify a brand voice