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# User Experience Research and Usability Test Plan

ENG 681 – USER EXPERIENCE

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## Purpose & Background

For English 681: User Experience, we were asked to conduct user experience research on the Minnesota State University, Mankato website. This process was as follows:

1. Learn the foundations and fundamentals of user experience research
2. Complete persona research and create three user personas
3. Conduct research on a target website or websites that are relevant to our user personas
4. Create a user experience research report and usability testing plan

The objective of this report is to summarize my user experience research and recommend usability testing to address what was discovered in my research and to make the target webpage(s) more useful for its target audience(s).

## University Website Best Practices

University websites can be a big deciding factor for prospective students. It is often the first impression the university makes on prospective students, especially with the recent and ongoing pandemic. University website are also where students go to look for resources and information on anything from financial aid to academic calendars to activities and organizations.

There is a lot of research on best practices for university websites (See UX Best Practices/University Website Best Practices for the research I reviewed). The following are some of the major takeaways that I got from the research that I read:

- Ease of navigation and search-ability are two of the biggest factors for a useful university website
- Slow-loading speeds can cause students to click away without the information they were seeking
- Accessibility is a legal requirement (Section 504)
- Mobile-friendliness is important for many reasons (bots, increase in smartphone usage, etc.)
- Dead links affect credibility and frustration (regular website auditing can help limit these)
- Too much text and large menus can be overwhelming and deter users

## Audience – Nontraditional Students

“By understanding the expectations, concerns, and motivations of target users, it’s possible to design a product that will satisfy users’ needs and therefore be successful (Faller).” Using personas for user experience research helps researchers know their audience and their needs, humanizes the users, and helps build create solutions that are more useful.

For my user experience, my three persona groups are students of color, students with accessibility accommodations, and current undergraduate students. After spending some time looking through the Minnesota State website, I decided to make all of my personas nontraditional students. Minnesota State Mankato defines a nontraditional student as “an undergraduate student 24 years of age or older, commute 15+ miles, married, divorced, widowed, a parent, current military or veteran. I made this decision because, through my research, I found that the population of nontraditional students on college campuses is increasing, but there is still a low graduation rate for nontraditional students. I wanted to find an overarching community at Minnesota State, Mankato that may not be getting their needs met through the university website.

**Brief Overview of Personas** (See each persona section for full details):

- **Persona #1:** Lupita Gomez, 25, is a first-generation, Mexican American undergraduate student. She is a full-time student in her second year. She commutes to campus for her classes and her on-campus part-time job. Lupita is an introvert and often feels like she doesn’t belong on campus.
- **Persona #2:** Sarah Lee, 19, is an incoming first-year student and a single mother. She wants to live off-campus but plans to attend class on-campus full-time. Sarah is also a full-time waitress. She has ADHD and needs to set up accommodations with the university and has not done so yet.
- **Persona #3:** George Smith, 41, is a first-year undergraduate student. He has worked as an office secretary for the majority of his career. He decided to get a degree to advance his career. He is a part-time student with a full-time job. He is married and has 1 adult child. George struggles with feeling too old to be a college student. He also has a hard time with new technologies and navigating the internet.

I have listed all of my research resources at the end of this report (See Persona Research). These resources may help with further understanding of this audience and assist in usability testing development.

## Persona #1



### Lupita Gomez

“I often feel like I don’t belong on campus.”

**Age:** 25      **Gender:** Female      **Marital Status:**  
Single

**Persona group:** Student of color

**Major:** Cognitive Science, Psychology

**Bio:** Lupita is a first generation, Mexican American undergraduate student. She is a full-time student in her second year. She commutes to campus for her classes and her on-campus part-time job. Lupita is an introvert and often feels like she doesn't belong on campus.

#### Technology and Internet Usage:

(Comfort Scale: 1-10)

**Desktop Devices:** 6

**Mobile Device:** 8

**Social Media:** 9

**Tech know-how:** 8

#### Descriptors:

Passionate, introvert, detail-oriented

#### Goals/Motivations:

- Wants to be first in family to graduate from college
- Wants to feel like she belongs on campus/ Wants to join activies or organizations to feel a part of the community

#### Needs/Pain Points:

- Financial Assistance
- Help navigating campus transportation and parking
- Imposter syndrom

#### Everyday Activities:

- Attends Class
- Works part-time On-campus
- Studying/homework
- Spends time with friends

## Persona #2



### Sarah Lee

"I don't have time to find the help I need."

**Age:** 19    **Gender:** Female    **Marital Status:** Single

**Persona group:** Students with Accessibility Accommodations

**Major:** Elementary Education

**Bio:** Sarah is an incoming first-year student and a single mother. She wants to live off-campus, but plans to attend class on-campus full-time. Sarah is also a full-time waitress. She has ADHD and needs to set up accommodations with the university and has not done so yet.

**Technology and Internet Usage:**  
(Comfort Scale: 1-10)

**Desktop Devices:** 5

**Mobile Device:** 9

**Social Media:** 6

**Tech know-how:** 7

**Descriptors:**

Goal-oriented, anxious,  
procrastinator

**Goals/Motivations:**

- Wants to graduate college to be a role model for her child
- Is passionate about becoming a teacher

**Needs/Pain Points:**

- Financial Assistance
- Help setting up accessibility accommodations
- Help finding off-campus housing
- Work/School/Family balance

**Everyday Activities:**

- Attends Class
- Works full-time
- Takes care of child

## Persona #3



### George Smith

"I often feel like the oldest student on campus."

**Age:** 41    **Gender:** Male    **Marital Status:** Married

**Persona group:** Current Undergraduate Student

**Major:** Business Administration

**Bio:** George is a first-year undergraduate student. He has worked as an office secretary for the majority of his career. He decided to get a degree to advance his career. He is a part-time student with a full-time job. He is married and has 1 adult child. George struggles with feeling too old to be a college student. He also has a hard time with new technologies and navigating the internet.

**Technology and Internet Usage:**  
(Comfort Scale: 1-10)

**Desktop Devices:** 6

**Mobile Device:** 4

**Social Media:** 4

**Tech know-how:** 5

#### Descriptors:

a bit of a technophobe, stubborn,  
easily frustrated

#### Goals/Motivations:

- Wants to get a degree and advance his career
- Eager to learn new things

#### Needs/Pain Points:

- Struggles with confidence and feeling "too old"
- Work/School/family balance
- Modern technologies

#### Everyday Activities:

- Work full-time
- Study/homework
- Spend time with family

## Target Webpage

The webpage that I decided to focus my research on is the University Resources for Nontraditional Students page. I chose this webpage because it is a page that I think could be useful for all three of the personas that I created. In short, this page is a list of resources for nontraditional students with a short description of that resource and a link to the associated webpage and/or the email address to contact for information.

### Target Webpage Information

#### University Resources for Nontraditional Students

**URL:** <https://mankato.mnsu.edu/university-life/activities-and-organizations/nontraditional-student-Resources/Resources-on-Campus-for-Nontraditional-Students/>

### Research Findings to Note

I found some things while investigating my target webpage that could trip up my personas and could be fixed or could be things to look into during testing.

In the financial aid section (See Figure 1), there is a button that says "Visit their website," however, that button is linked to an email address rather than a web address, as seen in Figure 2. This would likely been an issue for both Lupita and Sarah.

### Financial Aid - Student Financial Services/Campus Hub

Most Minnesota State Mankato students depend on federal, state and/or private funding assistance to finance their college education. The staff in Student Financial Services are committed to providing valuable information about financial aid programs and processes to ensure each student has access to the maximum available funds. The financial services specialists at the Campus Hub are available to answer questions and connect students with additional advising assistance if needed.

Appointments are required to meet with a financial aid advisor, however the Campus Hub is available to assist with walk-up questions. Additional resources and information regarding financial aid, billing, and more can be found on the Student Financial Services Website.

117 Centennial Student Union  
507-389-1866

[VISIT THEIR WEBSITE](#)

[COLLAPSE](#)

Figure 1: The Financial Aid section on the Nontraditional Students Resources page.

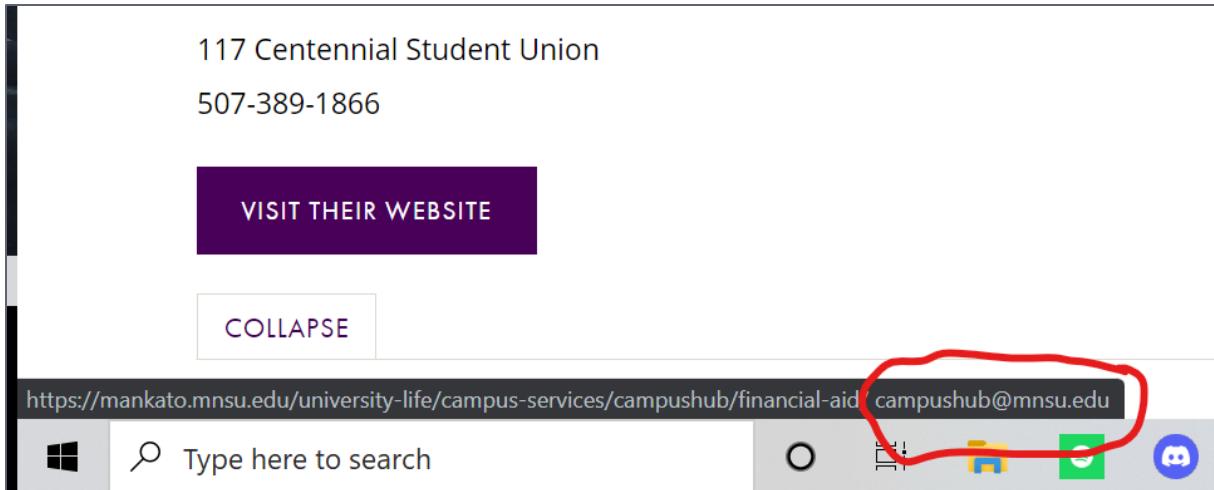


Figure 2: The link when hovering over the "Visit Their Website" button.

One of my personas, Sarah, needs to find out how to set up accessibility accommodations. In the Accessibility Resources section, the "Visit their website" button links to the library website rather than the Accessibility Resources page, seen in Figure 3. If you scroll down a lot, you can find a link to the Accessibility Resources page (See Figure 4), however, most people will not scroll down that far. Most people (including myself) would see that the link took me to the library website and would assume that the link was incorrect.

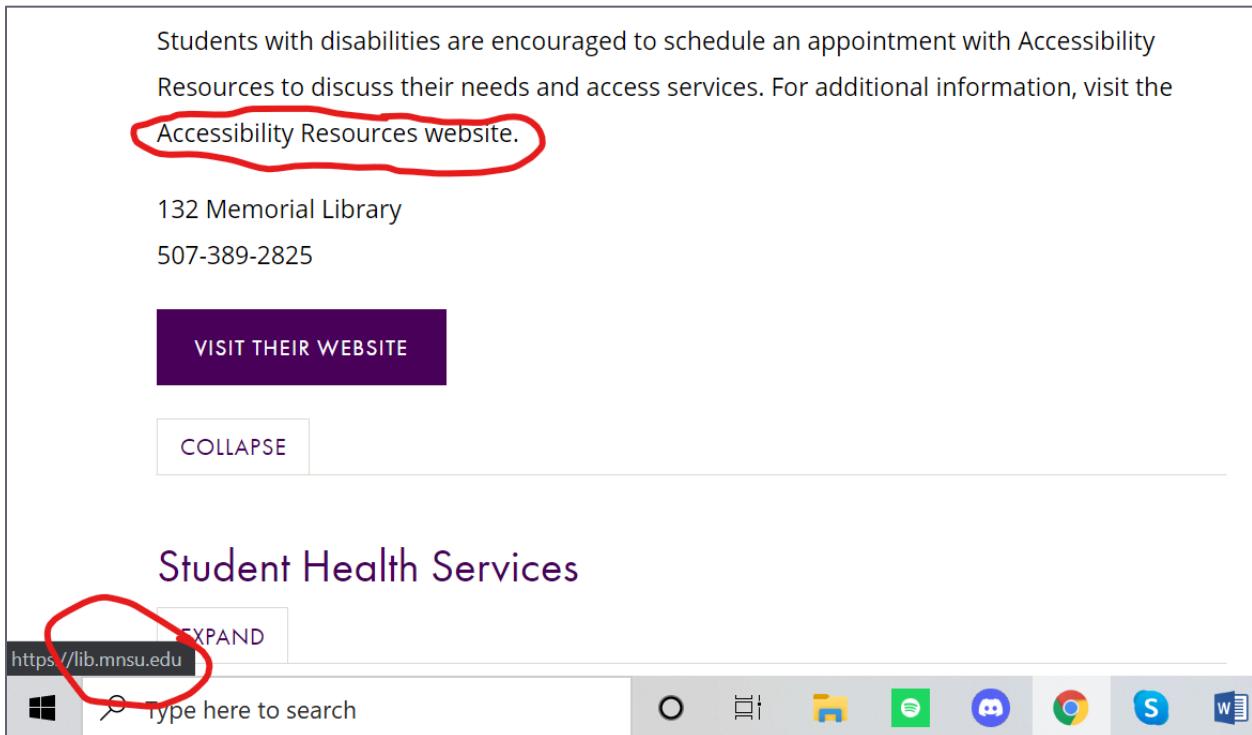


Figure 3: The link when hovering over the "Visit Their Website" button.

<p><b>SERVICES FOR...</b></p> <ul style="list-style-type: none"> <li>• <a href="#">Accessibility</a></li> <li>• <a href="#">Alumni &amp; Visitors</a></li> <li>• <a href="#">Faculty</a></li> <li>• <a href="#">Internal Staff Use</a></li> <li>• <a href="#">Off-Campus Use</a></li> <li>• <a href="#">Students</a></li> </ul>	<p><b>LIBRARY NEWS</b></p> <p><a href="#">Southern Minnesota Historical Center Receives Dotson Iron Castings Donation</a> LIBRARY   ARCHIVES   LIBRARY NEWS   MINNESOTA HISTORY</p> <p><a href="#">New Library Items</a> LIBRARY   COLLECTIONS   LIBRARY NEWS</p> <p><a href="#">New Library Scholarship Awards</a> LIBRARY NEWS</p> <p><a href="#">Library Newsletter</a> LIBRARY NEWS</p> <p><a href="#">MORE LIBRARY NEWS &gt;</a></p>	<p><b>LIBRARY SERVICES</b></p> <p>MEMORIAL LIBRARY 601 MAYWOOD AVE. MANKATO, MN 56002-8419</p> <p><a href="#">See Maps &amp; Directions</a></p> <p>507-389-5931 (Checkout Desk) 507-389-6201 (Hours)</p> <p><a href="#">Contact Us</a> <a href="#">Library Staff Directory</a></p> <p style="text-align: center;"></p>
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Figure 4: The link to the Accessibility Resources page from the Library page.

Although helpful, this page takes a lot of clicking and looking to find (See Figures 5 & 6), which would deter at least 2 out of my three personas from even finding these resources—unless they were given the link. This is also a very long webpage and once you start expanding the resources it gets even more daunting to scroll through.



The image shows a vertical list of links under the heading 'UNIVERSITY LIFE'. The links are:

- ACTIVITIES & ORGANIZATIONS** (highlighted with a red circle)
- CAMPUS RECREATION
- CENTENNIAL STUDENT UNION
- CAREER DEVELOPMENT CENTER
- UNIVERSITY SERVICES** (highlighted with a red circle)
- HOUSING
- DIVERSITY AND INCLUSION
- HEALTH AND SAFETY

Figure 5: These are the two places in the university website main menu that contain a way to get to the target webpage.

Figure 6: Page Navigation at the top of the webpage.

## Usability Testing Plan

In my usability testing plan, I will discuss areas that I consider unknowns, assumptions that can be made about this target audience, and give my suggestions for usability testing based on my user experience research.

### Unknowns

The following are questions that I had after conducting my research:

- **Access:** How would someone find this page? Searching specifically for this information? Given the link? How easy is it to find?
- **Content Organization:** Is there a way to make navigating this page easier? Reorganize? Redesign? Why are the resources listed in this order? Reorder resources in alphabetical order?
- **References:** Is Nontraditional Student Resources a physical office on campus? (The website makes it appear like it is, but there is no location listed)
- **Content:** Are there other resources that nontraditional students may need help finding that could be included?
- **Visuals:** Could the imagery at the top of this page be more representative of its audience? (I hate to make assumptions about who the people are in the picture, but in my opinion, the imagery is not representative).

### Assumptions

The following are assumptions that I believe can be made about this target audience, according to what I learned from my research:

- Nontraditional students have the same needs as any other student, but they also have their own unique needs.
- The population of nontraditional students is increasing, but they have a low graduation rate, so being connected to resources and feeling connected to campus is important to this audience. This is also important for my personas' other identity groups (students of color, students with accessibility needs, first-generation college students). Connection to resources can make a big difference in whether a student succeeds or fails.

### Testing Suggestions

I have four usability testing suggestions based on what I gathered from my research, my unknowns, and my assumptions. The tests I would recommend are two different card sorting tests, one related to the where the target page should appear on the website and one related to the order of the content on the webpage itself, a survey regarding how useful the target page is currently, and interviews to find the needs of nontraditional students and what

resources they use most, this could help find out what information may be missing from the webpage currently.

### Card Sort #1

This card sort test would be conducted with nontraditional students from various demographics (nontraditional students represent a large and diverse population). The objective would be to find the ideal/most logical place for the target page to be located. It is currently takes a lot of clicks to find. This test could be restricted to what is currently in navigation menu. The ideal outcome would be to make the target page easier to find so that it is a more useful resource.

### Card Sort #2

This card sort would also be conducted with a diverse group of nontraditional students. The cards should include all of the resources currently on the target page and any other relevant resources offered by the university. The objective would be to find the best organization for the information on the page and find out if other relevant resources fit with the organization. The ideal outcome would be to have a more user-friendly organization of the content so that the resources are more accessible.

### Survey

This survey would be done electronically and sent to nontraditional students. It would ask questions about the current state of the target page (i.e. did you know that this page exists, is the current page useful, what would you like to see added or changed). Ideally this survey would identify how useful the page currently is and how it could be more useful.

### Interviews

These interviews could be done in-person or virtually. They should be conducted with a diverse group of nontraditional students. These interviews would ask questions related to the needs of nontraditional students (i.e. what would make the university website easier for you to use or more useful). These interviews would be a bit broader (less focused on this particular webpage). They would ideally help answer some of the unknowns and help to understand the audience better and how the webpage/website can be better tailored for this audience.

## Resources

The following are links to websites and articles that I used for my user experience research throughout ENG 681 – User Experience:

### Persona Research

- Barnard-Brak, Lucy, et al. "Measuring College Students' Attitudes Toward Requesting Accommodations: A National Multi-Institutional Study." *Assessment for Effective Intervention*, vol. 35, no. 3, 2010, pp. 141-147. <https://journals-sagepub-com.ezproxy.mnsu.edu/doi/abs/10.1177/1534508409358900>

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- Moriña, Anabel. "The keys to learning for university students with disabilities: Motivation, emotion and faculty-student relationships." *PLOS One*, vol. 14, no. 6, 2019. <https://www.ncbi.nlm.nih.gov.ezproxy.mnsu.edu/pmc/articles/PMC6530886/>
- "Non-Traditional Student Challenges." *University of South Florida*. <https://www.usf.edu/student-affairs/counseling-center/what-we-do/non-trad-challenges.aspx>
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## UX Best Practices/University Website Best Practices

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- Speer, Hannah. "13 Higher Education UX Best Practices." *ERI Design*. <https://www.eridesignstudio.com/insights/ux-best-practices-for-higher-education-websites/>
- Veasey, Adriana. "Web Design: Effective UX Strategies for Educational Websites." *Icons8 Blog*. <https://blog.icons8.com/articles/ux-design-educational-websites/>