

Usability Report

Auburn City Schools Bus Portal

Presented on: November 17, 2021, by
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For: Auburn City Schools
Transportation Services

Table of Contents

Executive Summary.....	2
Methods.....	2-5
Usability Testing.....	2-4
Participant Profiles.....	4-5
Data Collection.....	5
Rolls of Team Members.....	5
Results	6-9
Quantitative Data.....	6-8
Qualitative.....	8-9
Findings and Recommendations.....	10-13
Conclusion.....	13
Appendices	14-40
Appendix A: Raw Data	14-18
Appendix B: Participant Handouts	20-23
Appendix C: User Handouts	24-40
Participant 1.....	24-26
Participant 2.....	27-29
Participant 3.....	30-32
Participant 4.....	33-35
Participant 5.....	36-37
Participant 6.....	38-40

Executive Summary

The Auburn City Schools (ACS) Bus Portal is used by parents and guardians to plan their child's bus routes. Users have reported numerous problems with using the interface, finding the right information, and navigating the portal. As this is a vital website for parents and guardians to get their children to school, we decided to test the portal and identify its major issues. This report details the steps we took to complete the testing, our recommendations, and provides the data we used to reach our conclusions.

We used two methods to test the ACS bus portal:

- Surveys conducted via Google forms
- Usability testing conducted via Zoom

These two methods provided us with invaluable information about the usability of the website as is and what users would like to see improved. The survey asked current users to describe, among other things, their experiences using the portal and suggested improvements. We asked each user to complete a pre-test questionnaire and a post-test questionnaire to help us quantify their opinions about the portal. The usability testing outlined a set of six tasks that emulated a real user's experiences. We used think-aloud protocols to fully understand the thought-processes of the participants and gain insight into their experiences.

To usability test the ACS bus portal, we asked six participants to take the test for us. Three of the participants were current graduate students enrolled in the English Department at Auburn University, and three participants were parents with students currently enrolled in one of the Auburn City Schools. The goal of having two separate groups was to provide insights into the usability of the portal based on experience and the lack-there-of.

Based on qualitative and quantitative data from both the surveys and the usability testing, we have the following recommendations that we believe will improve the functionality of the portal for all users:

1. Improving the navigation, accessibility, findability, and intuitiveness of the portal.
2. Creating a context-sensitive free address input field / adding a key for inputting addresses.
3. Providing quick access to help and troubleshooting.
4. Creating a better mobile experience to support multi-platform needs.

Methods

Our main objective was to gain an understanding of the ACS Bus Portal's functionality, or lack thereof, and determine what changes could be made to make it more user friendly. There were a total of six participants for the test, three parents who were already familiar with the ACS Bus Portal and three students who were not familiar. Participants used a computer to complete the usability testing. They also used a web browser and a mouse to navigate the website and complete a series of tasks to determine the following:

- The overall effectiveness of the bus portal website.
- Common issues that arise.
- Where improvements can be made.

The testing was completed via Zoom and was conducted using our personal computers in our separate houses.

In addition to the Usability Testing, we also created surveys using Google forms and sent it to parents and guardians via social media. They were completed using phones or computers. The survey asked participants to detail their experiences with the bus portal and explain in written paragraphs what changes they would make. The main goal with the survey was to determine:

- Where the most common errors occur using the ACS Bus Portal.
- What the overall satisfaction level with the current website is.
- What improvements can be made.

The surveys were conducted asynchronously at the participants' leisure.

Usability Testing Methodology

Each test was conducted on zoom with one team member acting as a facilitator and the other as an observer. The participants were first asked to fill out a consent form that was emailed before the testing began that asked for consent for us to:

- Record their responses and reactions.
- Turn their responses in to the university supervisor.
- Use their suggestions to make recommendations for the ACS Bus Portal.

We also asked for verbal consent to start recording the zoom sessions.

Pre-Test Questionnaire

The goal of the pretest questionnaire was to get the participants' first impressions of the ACS homepage and bus portal. The test asked participants to use the homepage to try and determine where they could access the bus portal (without accessing it yet) and their overall opinion of the design.

Usability Test

Participants were given a set of tasks to complete on the ACS Bus Portal with the goal of testing the functionality of the website while identifying errors in the system.

1. On the ACS home page, access the ACS Bus Portal.
2. (2-3) Using two pre-selected addresses, list the school name, bus number, bus stop location, times for pick-up and drop-off for students in 2nd and 4th grade, and 3rd and 6th respectively.
3. Describe the tools on the map.
4. Identify where help with the portal can be found.
5. Exit the portal.

These tasks emulate the types of tasks regular users would perform on the portal to find students' bus information. The goal was to simulate a real situation for the most accurate results for the test.

Posttest Questionnaire

The participants completed a questionnaire at the end of their testing that had them describe their experience using the portal. The questions asked participants about their overall experience, what they liked and disliked, and possible additions to the portal that would have increased the usability. The posttest questionnaire was completed in the same handout packet.

Participant Profiles

Surveys

The survey was sent to parents and guardians via social media through a university contact who has students enrolled in ACS. The participants were those who had prior experience using the ACS Bus Portal for their children to gain insight into the current opinion. The original goal was to have 15-20 responses, but even after a second posting the survey only garnered 6 responses. However, the results were still useful in reporting findings.

Usability Testing

There were a total of six participants for the usability testing: Three graduate students and three parents. These were certain requirements for participation.

For graduate students:

- A working device with internet access.
- Basic understanding of a computer/mobile device.
- A basic understanding of websites.
- No prior experience with the ACS bus portal.

For Parents:

- A working device with internet access.
- Basic understanding of a computer/mobile device.
- A student currently enrolled in ACS who rides the bus to school.

Data Collection

As the surveys were conducted using Google forms, the responses were recorded internally using the form itself. Responses to each question and supplementary graphs were created by Google forms' algorithm that were used to derive conclusions.

Participants for the usability tests were recorded via zoom. Each participant shared their screen and were observed by a team member to guide the test. Before recording, each participant filled out a consent form. During the testing, they completed a handout with the pre-test questionnaire, task list, and post-test questionnaire (Appendix B) that was used to report findings.

Roles of Team Members

Both team members took all three roles during the usability testing.

Facilitator:

- Oriented participants to the usability testing.
- Set the pacing for the completion of tasks.
- Assisted participants when they encountered issues.

Test Observer:

- Observed participants during the testing.
- Took notes during testing sessions.
- Assisted facilitator when necessary.

Data Logger:

- Took notes from recordings.
- Created charts/documents to quantify data.

Results

Quantitative Data

Surveys

The google form showed that 50% of users use a mobile device to access the bus portal.

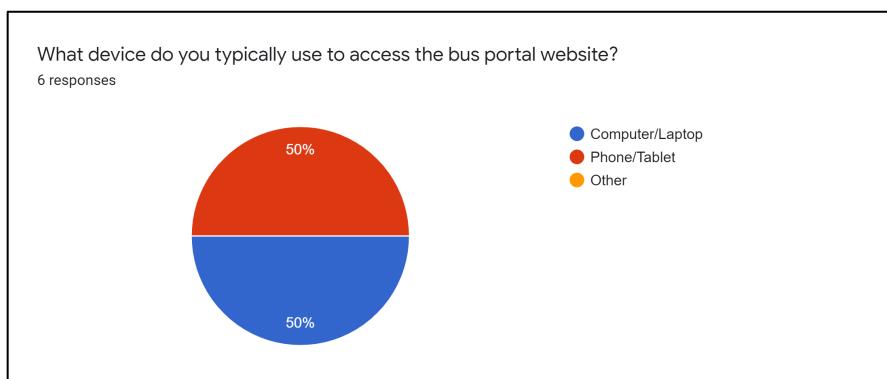


Figure 1: Devices used for the bus portal

Usability Testing

Quantitative data was collected and displayed using charts and graphs made using google forms and google docs. We timed each task to determine how long each participant took to complete it fully based on predetermined criteria.

Task 1: Access the ACS Bus Portal from the ACS home page.

The task was completed if the participant could find out where the bus portal is located on the home page, with no assistance from the testing team.

Task 2: Using a given address (**175 E Veterans Blvd, Auburn, AL**), find the following information for a student in the 2nd and 4th grade respectively.

The task was considered complete if the participants could find all the information required without assistance from the testing team.

Task 3: Using a given address (**449 N Donahue Drive, Auburn, AL**), find the following information for a student in the 3rd and 6th grade respectively.

The task was considered complete if the participants could find all the information required without assistance from the testing team.

Task 4: Explain the usage of the tools on the map provided.

The task was considered complete if the participant described the function of each map tool.

Task 5: Locate on the portal or the ACS home page where help can be found.

The task was considered complete if the participants found the right contact information from the correct help link, with no help from the testing team.

Task 6: Successfully exit the ACS Bus Portal.

The task was considered complete if the participant used the red “X” button at the top right corner of the bus portal.

The completion of each task was determined using the *Adobe Criteria*. A summary of the results can be found in the table as follows:

Participants	Task Numbers					
	1	2	3	4	5	6
1	x	x		x	x	
2	x	x	x	x	x	x
3	x	x			x	x
4	x	x	x	x	x	x
5	x				x	x
6		x	x			x

Figure 2: Completion of tasks by participant

Across all participants, task 3 provided the most issues to completion. This is due to the lack of consistency with the address input bar on the portal. The portal accepts the abbreviated form of the four cardinal directions but does not accept the full version. These instructions were not clear. Many participants struggled to input the address properly. After 4 minutes, if the participant did not quit of their own accord, we encouraged them to quit trying if they would in a normal scenario. This means that half of the participants completed the task.

Thus, tasks 2, 3, and 5 took participants the most amount of time.

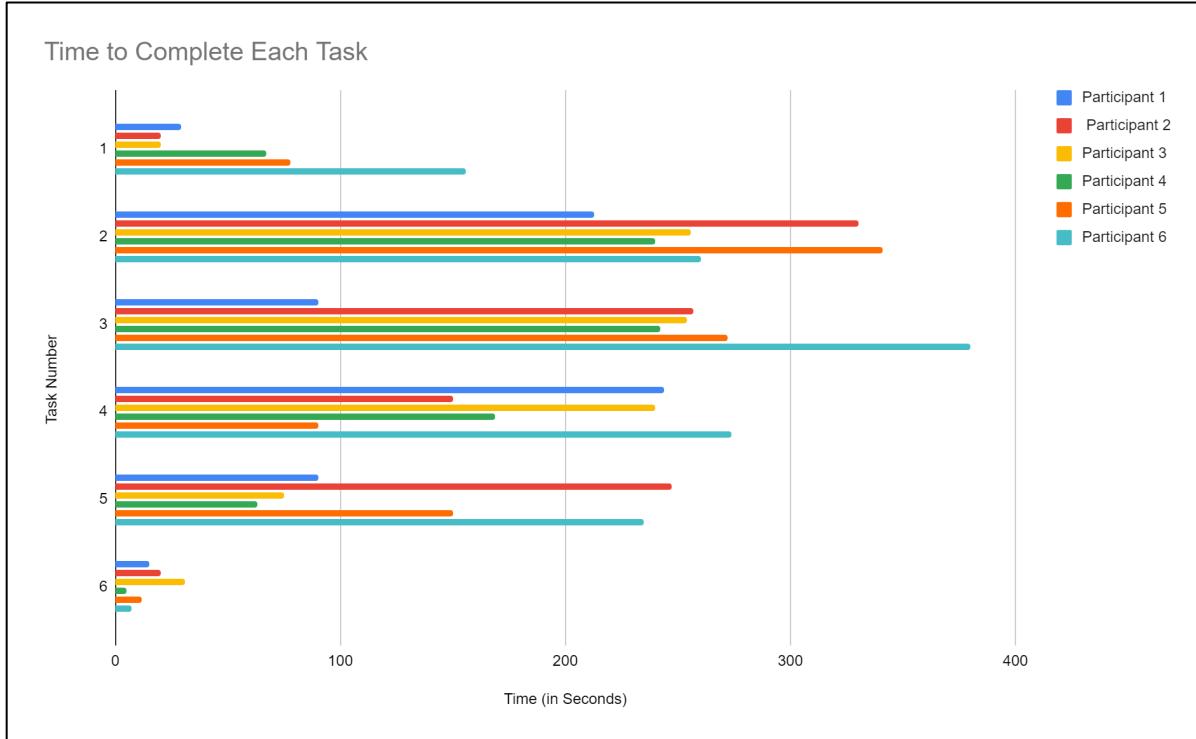


Figure 3: Time to complete each task by participants

Qualitative Data

Surveys

The surveys gave us insight into regular users' opinions about the current bus portal. More than half gave the bus portal a 5 or below on the rating scale with one participant giving it an 8. This means that most participants have had issues with the bus portal in the past. The survey asked participants to list changes they would like to see on the bus portal. There were a variety of answers, but most of them centered around improved usability.

Usability Testing

Pre-Test Questionnaire

Participants were asked to give their first impressions of the ACS website and navigate through some of the menus. Overall, the participants expressed that the website was somewhat confusing, and the location of some key elements were not clear. They were also asked to rate the complexity of the website. Participants gave answers between 5 and 7, with one participant giving it a 3. Overall, the first impression was that the website was usable but not without issues.

Post-Test Questionnaire

Participants were asked to describe their experiences using the bus portal. They were first asked how satisfied they were with the overall result.

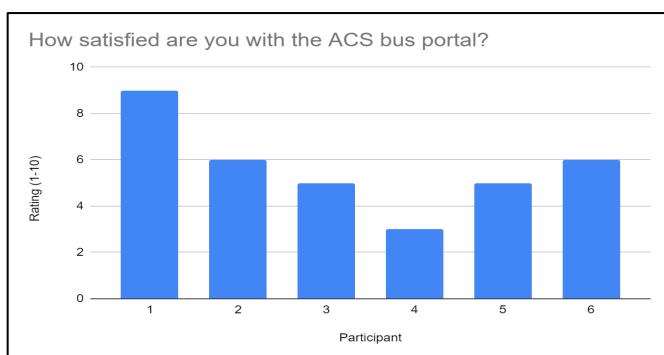


Figure 4: Satisfaction with the portal

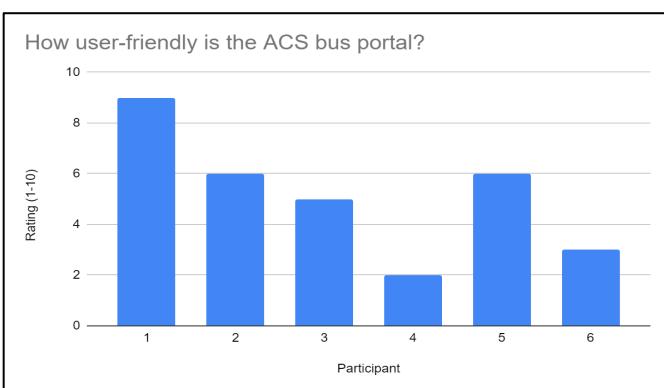


Figure 5: User-friendly rating of the portal

Findings and Recommendations

Finding 1: The ACS bus portal has a complex interface.

Recommendation: Limit the amount of scrolling users have to do and clearly identify the places where information can be found. Make the overall flow/process an intuitive one.

Evidence:

Many of the users struggled to navigate between the different sections of the bus portal to find all of the information requested in the tasks, especially tasks 2 and 3. As shown in figure 3 , the tasks took on average over 3 minutes to complete because of the number of steps required to get to the information. Most participants became frustrated after about 2 minutes of using the portal but continued to search the website for results. After the 4-minute mark, most participants who had not found the information noted that if it was not for the testing, they would have quit and called the school. Comments included:

- “I only knew to scroll down to the bottom of the screen because I’ve dealt with this website before, but I don’t think it’s very intuitive.”
 - “Scrolling back up and down and typing in addresses doesn’t feel as natural as it should.”
- One of the issues that participants noted was that the bus portal only lets users find the bus route information for one student at a time. Participants were frustrated, stating
- “I’m going to have to do two separate searches which isn’t great because it’s not uncommon to have more than one child.”

The limitation of looking up a single student greatly added to the time participants took to complete the task and added to their frustration.

The other interface issue is the map that is included on the bus portal website. At the bottom of the page is a list of the bus number, location, and time. However, the map covers half of the screen with no indication that it can be minimized. This feature hindered two participants from completing the task successfully as they could not find the times listed. Participant 4 was an experienced user of the bus portal, and yet they did not know the map could be minimized until they stumbled upon the feature by accident.

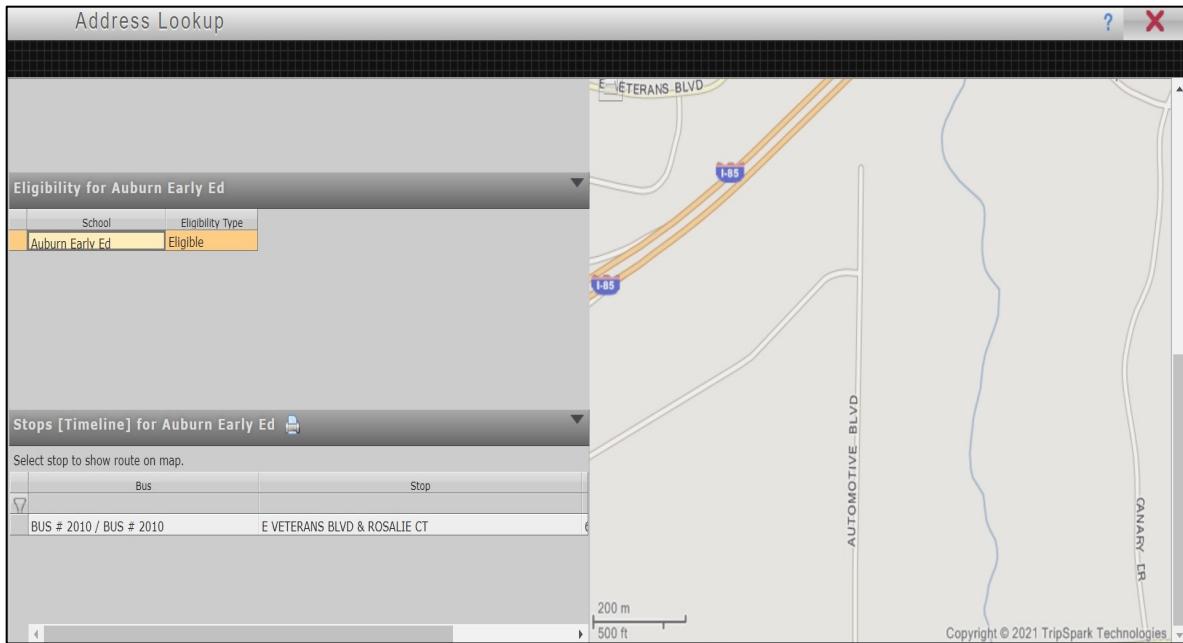


Figure 6: Map covering the time

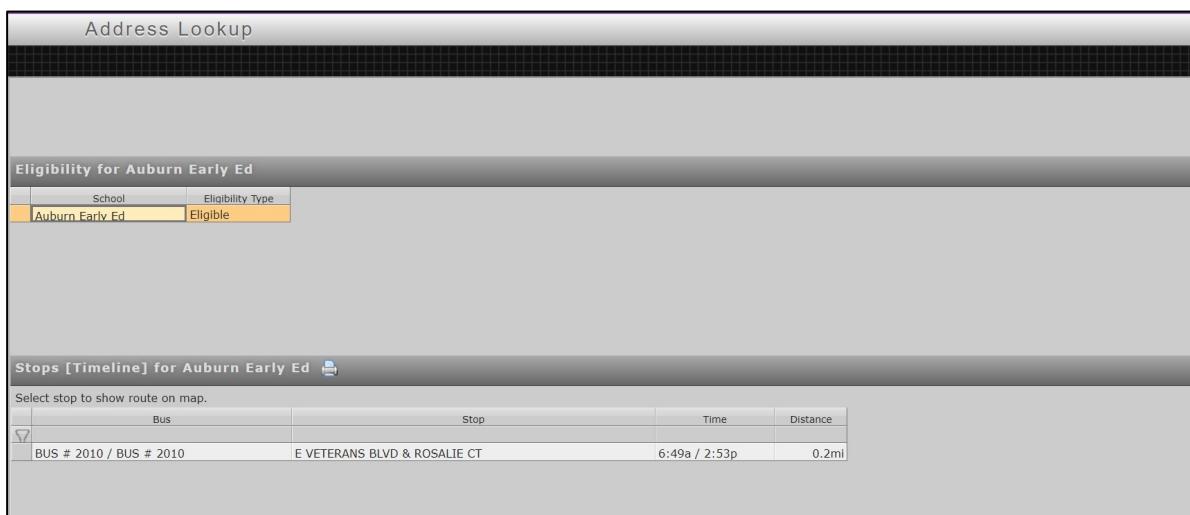


Figure 7: Map minimized

We recommend that the interface be condensed to present the information to users without having to scroll up and down the webpage. Users were lost in the information and waste time going back and forth between the categories to finally arrive at the information they need to effectively drop their child off for the bus. This includes either clearer direction to find the required information at the bottom of the page or the removal of the map entirely.

Finding 2: The Address Input field is difficult to understand.

Recommendation: Clearly define how to input an address with a key or make the input context-sensitive free.

Evidence:

The address input on the bus portal is not clearly defined. In Task 1, the address was given to participants as “E. Veterans Blvd” and the address showed results. However, Task 2 had users put the address in as “North Donahue Dr” because that is how the current resident (a member of the testing team) writes it. The portal only recognizes the address when abbreviations are used, like E for East and Blvd for boulevard. This created a problem for users as they could not find the second address without issues. Participant 4 tried a variety of inputs before they were able to find a match for the address. They stated:

- “That’s not intuitive at all because I don’t think most parents would keep trying like I did.” going on to say:
- “If I were a parent, I probably would have ended up calling the school after it wouldn’t give me any addresses.”

We recommend that the directions to put in an address are clearly outlined in the form of a guide that lists all the abbreviations required to get matches in the system. Every time a word is shortened, it needs to be made clear that it has to be input that way by the user. Or else, make the input field context-sensitive free. If a parent cannot find the information they are looking for, they are likely to quit looking and try to find other means to obtain the information.

The screenshot shows a web-based address search interface. At the top, a grey bar contains the text "1. Fill in Address" and a green "Clear" button. Below this is a white input field with a red border around its left side, containing the text "449 North Donahue drive". To the right of the input field is a green "Search" button. A grey banner below the input field reads "Fill in the address in the field below and press Search. Use abbreviations for street types (St, Dr, Ave, Ct, etc..)". Below the search area, a grey bar labeled "Matches" contains two tabs: "Matches" (which is selected) and "Advanced". Underneath this, a red box highlights the text "No match was found.".

Figure 8: Address without abbreviation

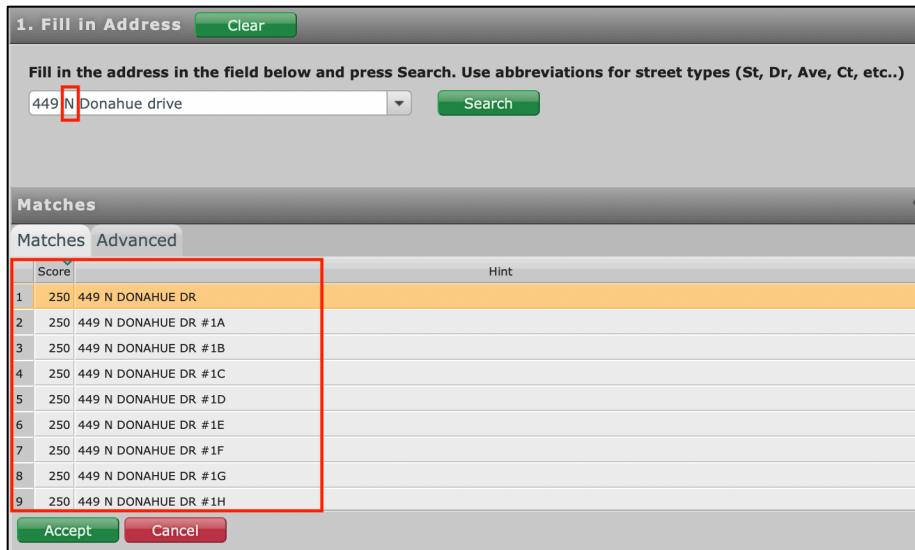


Figure 9: Address with abbreviation

Finding 3: There is no clear way for users to get help with the bus portal.

Recommendation: Add a working help button with clear contact information directly onto the portal.

Evidence:

Task 4 asked participants to find help for the portal. There were a variety of methods used to find help, but none of them yielded worthwhile results. The information is located back on the ACS page under the “Transportation” tab. Clicking on the button labeled “Transportation Information” yields three names and emails for employees but gives no indication for which one to contact.

The screenshot shows the Auburn City Schools website. The top navigation bar includes 'Our Schools +', 'Translator +', 'Sign In', 'Register', and a search bar. The main navigation menu has links for 'Home', 'Our System', 'Services', 'For Parents', 'For Staff', 'For Students', and 'School Zone Locator'. The sidebar on the left is titled 'Transportation' and lists 'Transportation Information', 'Forms', 'Bus Routes by School', 'Bus Stop Portal', and 'Law, Policy, and Guidelines'. The main content area is titled 'Transportation Information' and contains a 'Contact Information' section with the following details:

- Don Ingram**, Supervisor, 334-887-4915
[Click here to email Don Ingram](#)
- Jordan Sewell**, Assistant Supervisor, 334-887-4915
jwcsowell@auburnschools.org
- Dee Davani**, Route Scheduler, 334-887-4915
dsdavani@auburnschools.org

Figure 10: Contact Information page

Participants struggled to find this information without looking in several different places. One stated “I do not see any clear-cut way.” Participants also noted the lack of consistency and direction on the “Transportation Information” page. One participant noted “It lists three people, but it doesn’t really say what to contact them about” also noting that they all have the same phone number.

Another issue is the blue question mark at the right-hand side of the portal leads to an error page.

The screenshot shows a web-based address lookup interface. At the top, there's a header bar with the title "Address Lookup". Below the header, there's a search input field with the placeholder text "Fill in the address in the field below and press Search. Use abbreviations for street types (St, Dr, Ave, Ct, etc..)". Underneath the input field are two buttons: "1. Fill in Address" and "Clear". In the top right corner of the main content area, there is a small blue square containing a white question mark icon, which is highlighted with a red oval. To the right of the question mark is a red square containing a white 'X' icon, also highlighted with a red oval. This visual cue indicates that clicking the question mark leads to an error page.

Figure 11: The Help icon with error

We recommend that the contact information for the supervisors and coordinators is placed in the portal itself in a clearly labeled location, so users don't have to search to find help. There is already a help button in place, it can easily be made to link to the transportation information page.

Finding 4: The ACS Bus Portal is not the same across all platforms

Recommendation: Make the bus portal mobile-friendly to support multi-platform needs.

Evidence:

As seen in figure 1, roughly 50% of users access the bus portal using a mobile device. They have a much harder time finding relevant information compared to the laptop users. As there is no modification to the bus portal for mobile devices, users tend to get lost on the screen and can't find information. Participant 6 completed the test on a mobile device. It is clear that they struggled to find the information in a timely fashion. During the testing, they stated: “I think most people use their phones for everything”, in reference to their struggles to navigate the website. They got frustrated trying to find the times in Tasks 2 and 3 as the map does not move like on the computer.

In addition, participants on the survey indicated that they would like to make the portal easier to use on the phone.

We recommend that the bus portal needs a mobile version that lets users navigate more easily to fit the tendencies of the demographic. As participant 6 noted, a lot of users use their phone for everything, including parents. Keeping the same formatting for a mobile device and a computer leads to more frustration from users and more calls to the school.

Conclusion

The ACS Bus Portal is a valuable tool that is designed to aid users in finding important information. After talking to some of the parent participants, we learned that some of the schools do not promote the bus portal to potential users at all. Parents and guardians are told that the information is posted at the school, and they have to go look for themselves. The bus portal already exists, so it's worthwhile to make it more user-friendly and save everyone time and frustration. With a working bus portal, parents can find the information they need and will not inundate the schools with phone calls. Based on our research, surveys, and testing of the portal, we believe that with our recommendations, the ACS Bus Portal is a product that Auburn City Schools would be proud to promote to parents and guardians in the future.

Appendix A: Raw Data

Surveys

The results from the survey were collected via Google forms.

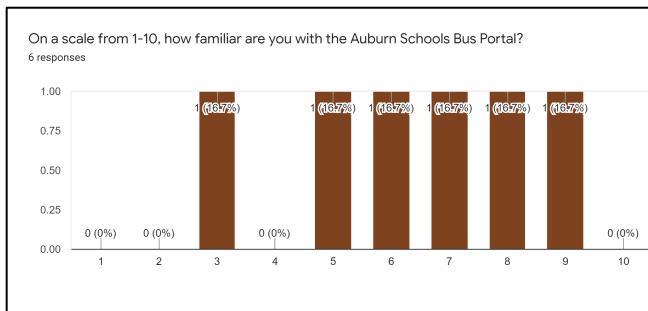


Figure 12: Question 1 results

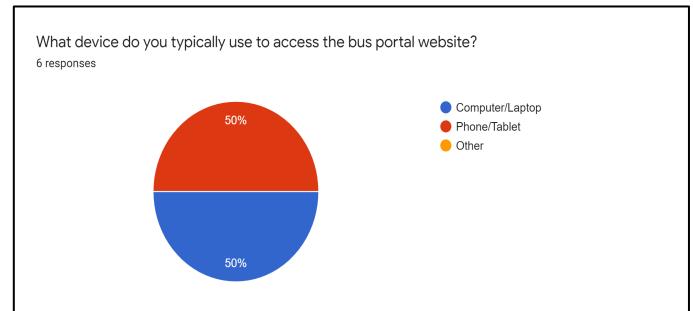


Figure 13: Question 2 results

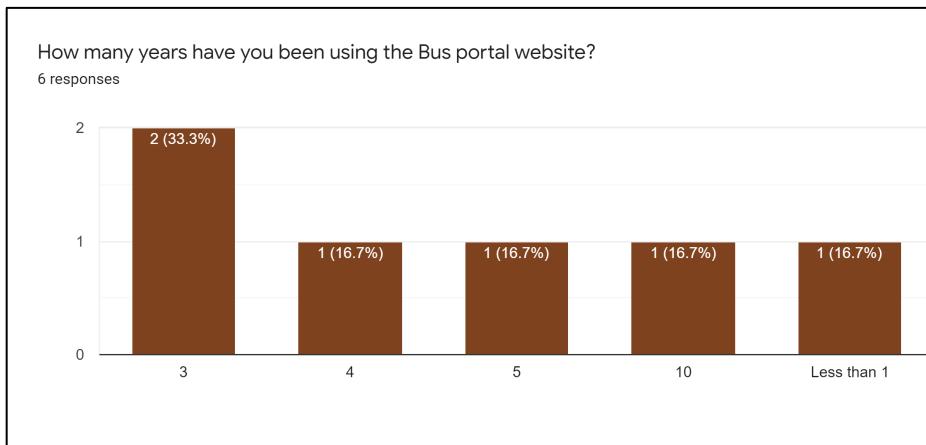


Figure 14: Question 3 results

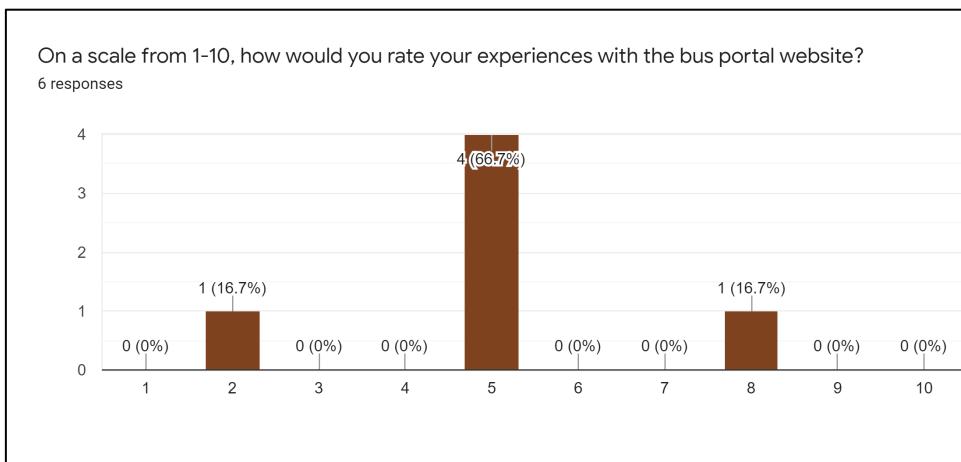


Figure 15: Question 4 results

Question 5: In a few sentences, how would you describe your experiences using the bus portal website?

1. You have to know the street names in your neighborhood pretty well to figure out which bus your child should take
2. It can be difficult
3. The portal menus are hard to see. It's not clear that you have to use the lower menu, the stops menu.
4. I find the bus portal to be cumbersome on a phone.
5. Used it once. Found what I was looking for. My kids won't ride bus for a couple more years. It told me we were eligible for walking

Question 6: In a few short sentences, please list the most common problems you've encountered using the bus portal website.

1. Finding it on the ACS webpage and finding that it is working
2. I have trouble seeing the menus. If I have used CTRL+ to magnify my view, I have to know to scroll way down the page. Also, it's not clear that you can click on the address to see the map.
3. Maybe it's just me, but it seems like it is not made to view on a phone. After you search for results you don't realize a map has been pulled up, off screen to the right. Then trying to get the map big enough and viewable is difficult.
4. Finding my address. Took a few tries to get it to work.

Question 7: Has the bus portal website ever given you the wrong information about your child's bus stop location? If so, please describe:

1. No
2. No.
3. Yes. The map shows the pickup location as N Cary and Thornapple Lane. Thornapple cuts across a loop in N Cary; the map shows the pickup location on the western intersection, but the actual pickup location is on the eastern intersection.
4. I don't know.

Question 8: If you could change one thing about the Bus Portal Website, what would it be?

1. Put in your address and then have it tell you your bus number and pick up/drop off times instead of having to scroll through pages and pages of bus routes
2. That it's findable on the ACS page.
3. I would adjust the spacing to make the menus/fields that pop up easier to see and find.
4. Make it easier to use on a phone.

Usability Testing

The analysis charts of the usability testing were as follows:

User	Locating the bus portal in one glance (Pretest task b)	Usability task (a)	(b)	(c)	(d)	(e)	(f)
McKenzi	1m 43s (couldn't locate)	29s	3m 33s (couldn't find time at first, then she slid the map away and discovered it.)	1m 30 s (couldn't find the results)	4m 4s (got all except layer config, pins, & geocode.)	1m 30 s (went back to home page, then later found it on Transportation page. Didn't locate the one on the bus portal though.)	15 s (Didn't use the red cross button. Closed the tab instead)
Lev	1m 10s (they did locate)	20s	5m 30s	4m 17s (found the result after abbr "N" by own understanding.)	2m 30s (got all except layer config & geocode.)	4m 7s (went to the home page, found the generic ACS contact number, then switched to bus portal to click on the help button only to find it not working, then landed on the Transportation page to see the list of names/contact details.)	20s (Used the red cross button)

User	Locating the bus portal in one glance (Pretest task b)	Usability task (a)	(b)	(c)	(d)	(e)	(f)
Caitlin	27s (She looked around first, then went to the Bus Routes quick link and opened the portal)	20s (Since she already knew the quick link)	4m 16s	4m 14s (Couldn't find the results)	She didn't really explore the map tools. However, this is what she spoke of in general search functionality: If you have any technology that I mean I'm trying to imagine doing this on your phone and it would be so difficult. So, if you have a clear image of what the search terms look like, yes, but because of the way this is designed it doesn't feel very user friendly, especially not the advanced search.	1m 15s (went to the home page first, then got back to the portal and clicked the help link.)	7s (she did click the red cross, but her comment was that despite that closing the tab is required so it's an additional task.)

User	Locating the bus portal in one glance (Pretest task b)	Usability task (a)	(b)	(c)	(d)	(e)	(f)
Galaxy S7	Skipped this task	1m 7s (She googled ACS bus portal and was taken to the bus portal page directly.)	4m 20s (Performed the steps correctly but not sure if she found all the results.)	6m 20s (Kept scrolling over the map, didn't know how to return to previous screens, wasn't sure of how to find the required information.)	Skipped this task	Didn't really look it up on the portal. She just said she'd call the bus depot.	31 s (She used the red cross button to exit successfully.)

User	Locating the bus portal in one glance (Pretest task b)	Usability task (a)	(b)	(c)	(d)	(e)	(f)
Leslie	1m 18s	Didn't perform the navigation again.	4m (She could gather all the required information, including time.)	4m 2s (When results were not found, she went back to the Transportation page and then renavigated to the bus portal thinking the address needed refresh. Later she used the word "N" to get the results right.)	2m 49s (She says she understand somewhat but it's not very intuitive.)	1m 3s (She went to the Transportation page and noted the email addresses and contact number but didn't locate the help icon.)	5s (Closed the tab and didn't use the red cross.)

User	Locating the bus portal in one glance (Pretest task b)	Usability task (a)	(b)	(c)	(d)	(e)	(f)
Dr. Young blood	(She already knew how to so didn't really need to perform the task.)	2m 36s (Found the portal as per the process.)	5m 41s (Could find all the required information except time.)	4m 32s (Could find all the required information except time.)	1m 30s (Couldn't understand one of the icons. She thought the tools would help her find time, but it didn't really work.)	2m 30s (She went to the Transportation page and noted the email addresses and contact number then much later located the help icon.)	12s (She used the red cross button to exit successfully.)

Appendix B: Participant Handouts

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

1. Record your responses and reactions to these set of questions/tasks to be performed for the ACS bus portal interface.
2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

People can observe me during the research

The session can be recorded during observation

The recording can be watched by the observers in the future

Name: _____

Date: _____

Sriraksha Deshpande

Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

Our product here is the school bus transport system within the Auburn City Schools website. The main users of the ACS transport system are parents/guardians of the students that need to ride the city school buses.

Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

- a. Have you used the Auburn City Schools (ACS) bus stop portal before?
- b. Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from?
- c. By just glancing at the website elements and its design, how would you rate its complexity on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

Usability Tasks

- a. Open a new window in the internet browser. Access the Auburn City Schools (ACS) website. Navigate to the Bus Portal from the ACS homepage.
- b. On the bus portal, use the address given below and list the following for students in the 2nd and 4th grades respectively: **Address: 175 E Veterans Blvd Auburn, AL**
 1. School Name:
 2. Bus Number:
 3. Bus Stop Location:
 4. Time:

- c. Using the given address, list the following information for students in 3rd and 6th grades respectively: **Address: 449 North Donahue Drive Auburn, AL**
1. School Name:
 2. Bus Number:
 3. Bus Stop Location:
 4. Time:
- d. Could you understand the usage of all the tools provided on the map? Tell us what you understood or explored for each of the tools.
- e. You need additional help with understanding the portal. On the portal, where (or who) can you reach out to for help or assistance on the same?
- f. When you are ready, please exit the portal. Could you do it successfully?

Posttest Questionnaire

- a. How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest).
- b. What was the navigation experience like?
- c. What did you like the most about using the portal?
- d. What did you not like about the portal?
- e. Did you experience any difficulties while using the portal? If so, please explain.
- f. How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest).
- g. How likely would you be to consult this site in the future to learn about bus stops?
- h. Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

Appendix C: User Handouts

Participant 1

Supplementary Materials

Consent Form

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

1. Record your responses and reactions to these set of questions/tasks to be performed for the ACS bus portal interface.
2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

MM People can observe me during the research

MM The session can be recorded during observation

MM The recording can be watched by the observers in the future

Name: Mckenzi Marlow Date: 11/11/21

Sriraksha Deshpande
Sriraksha Deshpande

Kelsey Trimble
Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

Our product here is the school bus transport system within the Auburn City Schools website. The main users of the ACS transport system are parents/guardians of the students that need to ride the city school buses.

Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

a) Have you used the Auburn City Schools (ACS) bus stop portal before?

No ♡

b) Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from?

Yes, I think I just need to click around.

c) By just glancing at the website elements and its design, how would you rate its complexity on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

A 5 - lots of menus but all clearly labeled

Posttest Questionnaire

- a) How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

9

- b) What was the navigation experience like?

Pretty self explanatory, and I found what I needed quickly.

- c) What did you like the most about using the portal?

Everything was clear and easy to follow.
Search bar worked and quickly.

- d) What did you not like about the portal?

- Consolidate drop down ~~menu~~ menus

- e) Did you experience any difficulties while using the portal? If so, please explain.

I couldn't find that one address, which might just be human error. Also, if I had a real kid, I'd just call someone.

- f) How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

9

- g) How likely would you be to consult this site in the future to learn about bus stops?

on a scale of 1-10, 9, very likely.

- h) Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

No. ♀

Participant 2

Supplementary Materials

Consent Form

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

1. Record your responses and reactions to these set of questions/tasks to be performed for the ACS bus portal interface.
2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

VKB People can observe me during the research

LSB The session can be recorded during observation

LSB The recording can be watched by the observers in the future

Name: Sriraksha Deshpande

Date: Nov 11, 2021

Sriraksha Deshpande

Kelsey Trimble

Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

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Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

a) Have you used the Auburn City Schools (ACS) bus stop portal before?

No

b) Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from?

Yes, but ^{can't} confusing

c) By just glancing at the website elements and its design, how would you rate its complexity on a

scale of 1 to 10? (1 being the lowest and 10 being the highest).

7

Posttest Questionnaire

- a) How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

6

- b) What was the navigation experience like?

Normative, some info could be clearer (titles for where info is being held)

- c) What did you like the most about using the portal?

Once you searched for an address it was fairly straightforward

- d) What did you not like about the portal?

The tools for the map itself were mostly unclear

- e) Did you experience any difficulties while using the portal? If so, please explain.

- tools for map / poorly labelled and not fully explained
- finding contact info / poor labelling; had trouble locating info

- f) How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

6

- g) How likely would you be to consult this site in the future to learn about bus stops?

Very? What alternatives are there?

- h) Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

Help buttons / FAQ / some buttons on map need labels

Participant 3

Supplementary Materials

Consent Form

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

1. Record your responses and reactions to these set of questions/tasks to be performed for the ACS bus portal interface.
2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

C E Y People can observe me during the research

C E Y The session can be recorded during observation

C E Y The recording can be watched by the observers in the future

Name: C. J. Somer

Date: 11/11/21

S. Deshpande
Sriraksha Deshpande

K. Trimble
Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

Our product here is the school bus transport system within the Auburn City Schools website. The main users of the ACS transport system are parents/guardians of the students that need to ride the city school buses.

Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

a) Have you used the Auburn City Schools (ACS) bus stop portal before?

No

b) Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from?

Yes and no

c) By just glancing at the website elements and its design, how would you rate its complexity on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

6

Posttest Questionnaire

- a) How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

5

- b) What was the navigation experience like?

5

- c) What did you like the most about using the portal?

5

- d) What did you not like about the portal?

5

- e) Did you experience any difficulties while using the portal? If so, please explain.

- f) How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

5

- g) How likely would you be to consult this site in the future to learn about bus stops?

- h) Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

Participant 4

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

1. Record your responses and reactions to these set of questions/tasks to be performed for the ACS bus portal interface.
2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

- BJ People can observe me during the research
BJ The session can be recorded during observation
BJ The recording can be watched by the observers in the future

Name: Leslie Johnson

Date:

11/12/2021 

Sriraksha Deshpande

Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

Our product here is the school bus transport system within the Auburn City Schools website. The main users of the ACS transport system are parents/guardians of the students that need to ride the city school buses.

Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

- a) Have you used the Auburn City Schools (ACS) bus stop portal before?

Yes

- b) Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from?

Sort of

- c) By just glancing at the website elements and its design, how would you rate its complexity on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

3

Posttest Questionnaire

- a) How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

5

- b) What was the navigation experience like?

not intuitive

- c) What did you like the most about using the portal?

bus #

bus times

- d) What did you not like about the portal?

No Th → N

- e) Did you experience any difficulties while using the portal? If so, please explain.

Yes could not find address on 1st search

- f) How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

3

- g) How likely would you be to consult this site in the future to learn about bus stops?

pretty likely

- h) Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

Participant 5

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

1. Record your responses and reactions to these set of questions/tasks to be performed for the ACS bus portal interface.
2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

SY People can observe me during the research

SY The session can be recorded during observation

SY The recording can be watched by the observers in the future

Name: Sriraksha Deshpande

Date: 11/12/2021

Sriraksha Deshpande

Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

Our product here is the school bus transport system within the Auburn City Schools website. The main users of the ACS transport system are parents/guardians of the students that need to ride the city school buses.

Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

- a) Have you used the Auburn City Schools (ACS) bus stop portal before?

Yes, for the last three years.

- b) Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from?

Yes, based on prior experience.

- c) By just glancing at the website elements and its design, how would you rate its complexity on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

Posttest Questionnaire

- a) How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

3

- b) What was the navigation experience like?

Limited options, but there are constraints (e.g., North Donahue).

- c) What did you like the most about using the portal?

I like the map.

- d) What did you not like about the portal?

Spacing (above Stops). Exact spelling (abbreviation for N in North Donahue). I'd like to know the stop times. Did you experience any difficulties while using the portal? If so, please explain.

Finding Stops. Finding times.

- e) How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

2

- f) How likely would you be to consult this site in the future to learn about bus stops?

10

- g) Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

Times for bus stops. Clarity for stops with intersection names that are ambiguous.

Participant 6

Informed Consent

Do Sriraksha Deshpande and Kelsey Trimble have your consent to:

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2. Turn in your responses to their university supervisor.
3. Use your responses in the future to make suggestions to the ACS for their bus portal website.

I give my consent that:

(Please initial by all that apply)

People can observe me during the research

The session can be recorded during observation

The recording can be watched by the observers in the future

Name:

Sarah y Goffin

Date: 11-13-2014

Sarah y Goffin

Sriraksha Deshpande

Kelsey Trimble

Orientation Script

Observer briefing:

We are first year master's students in the English department. For our MTPC course, we have a project wherein we must conduct a usability evaluation of a technological artifact or technologically mediated space. We need to research the artifact/space, its context, and its users, and then design, conduct, and evaluate user-centered research for the same. This valuable research while working with real people will help us find out what in the interface works well and what could be improved in the next iteration. The information gathered during one such research can be useful to make decisions about a website, functionality, portal, etc. for the near future even if a refresh is not currently scheduled.

User introduction

Our product here is the school bus transport system within the Auburn City Schools website. The main users of the ACS transport system are parents/guardians of the students that need to ride the city school buses.

Our aim is to test the interface and not you or your performance. You are going to be under observation for the same.

Pretest Questionnaire

- a) Have you used the Auburn City Schools (ACS) bus stop portal before?

Yes

- b) Looking at the ACS home page, do you believe you completely understand how and where to access the school bus portal from? Yes

- c) By just glancing at the website elements and its design, how would you rate its complexity on a scale of 1 to 10? (1 being the lowest and 10 being the highest).

6 - Should be able to search instead of going thru all bus routes.

Posttest Questionnaire

a) How satisfied are you with the overall experience of using the ACS Bus Portal? Rate it on a scale of 1 to 10? (1 being the lowest and 10 being the highest). ~6

b) What was the navigation experience like? - Not good. Maybe because I was on my phone instead of a laptop. -

c) What did you like the most about using the portal?

If helps that you can enter an address

d) What did you not like about the portal? - lags in response.

Not clear instructions. -

e) Did you experience any difficulties while using the portal? If so, please explain.

Not really - Maybe it takes getting used to it

f) How user friendly do you think this portal is on a scale of 1 to 10? (1 being the lowest and 10 being the highest). - 6 -

g) How likely would you be to consult this site in the future to learn about bus stops?

Probably - ??

h) Are there any features, functions, or information that this site does not currently include that you would like to see added in future versions? If so, please describe.

Not really - Just have to get used to using the