



ARE WE OPEN

2 OVERVIEW

3 DESIGN PROBLEM

7 PROTOTYPE [1]

PROTOTYPE [2]

DESIGN SOLUTION

APPENDICES

OVERVIEW

Decisions about snow days are often controversial, placing stress on both administrators (who have to make the decision) and parents and students (who are affected by the decision). Administrators make their best guess given the data they have, but parents (who are often in the dark on how these decisions get made) may disagree with the decision. Their disagreement can sometimes turn public, making the administration's next decision even more high stakes.

Snow day decisions are important, carrying significant consequences for school funding, child care services, and (most importantly) student safety. Thus, it's important that the decision is made with reliable, verified, and objective data so that administration can feel justified in their decision. For parents and students, it's important that the snow-day decision making process is made more transparent in order to ensure that their safety is being prioritized and to build community confidence in school closure decisions.

Are We Open solves this problem by helping to quantify the decision-making process and affording transparent communication about snow day decisions between administrators and community members. At the heart of Are We Open? is an algorithm that uses data from local weather sources to calculate the safety level of the weather. The algorithm reports the results of its calculations by generating a number between 1 and 10 (1 being no real threat and 10 being very dangerous road conditions). Parents and school administrators would use this algorithm to collaboratively set their school's closure threshold number (i.e., "Our school district will close school for a threshold reading of 8.5 or higher") in advance of any inclement weather.

On the morning of a potential snow day, school administrators would use this threshold number to help make their decision. The number would also be shared with parents/students/teachers who would use the mobile ap-

plication to check the threshold number for their school and be notified of the school administration's decision. On tough calls, school administration could use this mobile application to explain the reasoning behind their decision with parents. It is our hope that this will not only help make the snow day decision more objective, but it will allow parents to feel informed about their decision and give them opportunities to engage in constructive dialogue about school closure decisions with school administrators.

This report represents a summary of our research and design process, beginning with how we identified the design problem through field interviews and digital observations. After that, our team will walk you through our prototyping process and show how user feedback gathered after early design iterations was used to inform the final design solution.

Although we feel the final design represents a vast improvement from the original design problem, we are well aware of some weaknesses in our design that should be addressed in future iterations. For example, the system currently does not have a good way of factoring human expertise (e.g., the "eyes on the road" data from school transportation chiefs) into the algorithmic calculation, nor does it allow for... Although these flaws are significant, we feel the current design accurately meets a community-identified need and input from that community is reflected in the design prototype.

DESIGN PROBLEM

COMPLICATED, CONTESTED, HIGH-STAKES DECISIONS

This winter proved to be a particularly bitter one and— especially in the midwestern United States — this bad weather resulted in a lot of school closings due to bad weather (i.e., “snow days”). Across various social media channels, our team watched as parents, students, and teachers reacted to this increased number of snow days. It seemed like no matter what decision school administrators made, there was a stream of negative public reaction.

In order to understand this problem further, we talked with local superintendents and parents about the snow day decision-making process. From superintendents, we learned how many factors— both weather-related and non-weather-related —go into a school day closing decision. Factors ranging from windchill, to buses starting/not starting, school budget, teachers’ union contracts, and more were all factors weighing on administrators when making the decision. We learned just how stressful and complicated the decision can be.

From parents, we learned how disruptive snow days can be to their daily routine, particularly if both parents work and child care options are not easy to come by. We also learned how often parents wonder about what goes into the decision-making process— as well as how frustrating the snow day notification process can be.

In order to generate accurate user models and example scenarios, we combined our team’s in-person interviews, digital observations, and social media posts in order to create representative personas for both school administrators and parents. We then constructed sample scenarios based off of an amalgamation of characteristics we were seeing in our fieldwork. The results of this data collection and analysis comprise the remainder of this section of our design report.

“ALMOST DIED MULTIPLE TIMES ON THE WAY TO SCHOOL BUT APPARENTLY THAT’S NOT GOOD ENOUGH FOR A SNOW DAY. I’LL MAKE SURE TO DIE NEXT TIME, THANKS.”

@siriusmalik

PERSONAS

Linda Goldman, Superintendent

Linda Goldman is the superintendent of Baldwin School District, a mid-sized school district comprising 7,000 students in 17 schools located in southeast Wisconsin. She assumed this position five years ago when the district was in financial crisis and since then she has had to make some tough calls. Although she has lived in the community her entire life and has built a lot of personal rapport with various members of the Baldwin School community, a few of her more recent decisions have been met with negative public backlash.

Now the school district is three months in to what is proving to be an abnormally cold and snowy winter. As superintendent, Goldman is responsible to make decisions about when the school will close for inclement weather (i.e., have a “snow day”). No matter what call she makes, Goldman feels like there’s no way to make people happy. Goldman often makes the call using her best judgment given the local weather data, but there’s always an element of guesswork. She wishes she had a more objective way to justify her decisions and an effective way of communicating the reasoning behind her decision with the faculty, parents, and students of Baldwin Schools.

Tom, Greenhouse, Business Owner/Parent

Tom Greenhouse runs Greenhouse Printing, a home business start up that has grown significantly in recent years. Tom is married and the father of three kids, Aaron, Thomas, and Jessica, ages 15, 11, and 7 respectively. The recent expansion of Greenhouse Printing has made life difficult on Tom and his wife when it comes to figuring out plans for the kids. Between coordinating rides to and from school, daycare, and the many activities, any unexpected changes in the family schedule tend to cause havoc.

Tom is ambitious about his business, but nothing is more important than the well being of his children. However, every time school closures are a possibility Tom is put under a great deal of stress. On several occasions Tom has closed Greenhouse Printing for the following day in anticipation of a school closure, only to find come the morning that school remained open. Tom isn’t one to get upset with the public school administration in regards to closings, but he does wish there was a better way to stay more in tuned to potential closings or lack thereof.



SCENARIOS

School Superintendent Makes Tough Choice

Baldwin School District Superintendent Linda Goldman hears her phone alarm and groggily switches it off before looking at the time— 3:30am. Rolling out of bed, she heads downstairs to make some coffee. While it's brewing, she pulls out her iPad and looks at the weather reports from WeatherBug, weather.com, the National Weather Service. At the same time, she turns her TV to a local news station and listens to their reports. She spends a lot of time sifting through the various tabs on her web browser to compare predictions between sites and even switches stations on the TV so she can compare the two local weather reports from Channel 6 and Channel 8 news.

Around 3:45am, Goldman calls Peter Furler, the district's transportation chief and bus manager. She asks Furler if the buses are starting well (they sometimes freeze in the winter) and what the road conditions are like. Furler reports that all but five of the district's twenty buses are starting but that he's unsure of the road conditions. Goldman and Furler decide that the best way to know the conditions is to test them out themselves. They split the district into western and eastern halves with the idea that Furler will drive the roads on one half and Goldman will drive the roads on the other. Once they've driven their routes, Furler and Goldman agree to call each other and compare notes.

After hanging up with Furler, Goldman dresses quickly and heads outside to scrape off her car and start driving her route. Once she's on the road (4:00am), Goldman is having a hard time focusing on driving because of the constant barrage of phone calls she's receiving. Since she's close with a lot of the superintendents from neighboring school districts they often consult one another on questionable snow days. Politically, it looks bad for one district to stay open or close if all the neighboring districts make the opposite call; thus, the superintendents like to conference together before making a school opening/closing decision. When she's driving, however, Goldman doesn't have an easy way to track what decision (if any) neighboring school districts have made so she feels like she'll have a lot of catching up to do when she gets back home.

At 4:30am, Goldman pulls back into her driveway and immediately gets on the phone with Furler who has also completed his route. Although the road conditions were really bad, Furler reminds Goldman that they drove when it was really windy so there was a lot of drifting snow and that the plows haven't been sent out yet. Thus, Goldman and Furl-

er speculate about whether the roads will still be that bad around 7:30-8:30am when parents, students, and teachers are travelling to school. While she's still on the phone with Furler, Goldman turns on Channel 8 to look at the posted school closings. So far, none of the districts in her area have made a decision. She looks at the clock and sees that it's 4:40am. She knows that the decision needs to be made by 5:00-5:30am at the latest so that the working parents in her school district can see the closing in time to make childcare arrangements before they need to leave for work. Reaching for another cup of coffee, she starts dialing phone numbers.

For the next ten minutes she has short, pointed conversations with the superintendents of the three school districts bordering Baldwin schools asking them about their decision-making progress. All the superintendents seemed hesitant to make the call. They had already closed school four times that winter and they were rapidly approaching the six day limit that the state of Wisconsin had set. After six days, Goldman knew she would have to extend the school year at a cost of \$500,000/day. The district was struggling financially and Goldman knew that too many extra days would result in teacher layoffs next year. Although the present conditions were pretty bad, Goldman hoped that perhaps by 7:30 the roads would be better. She decided to leave the schools open. She called Peter Furler at around 4:55am to alert him of her decision and they talked about contingency plans for the five buses that weren't starting.

Around 5:00am Goldman started getting ready for the day and was heading back upstairs to take a shower when she decided to check the school closings one last time. To her dismay she saw that two of the neighboring school districts had decided to close. In the shower, she started mentally preparing herself for the onslaught of questions and complaints from the district's faculty, parents, and students who would want to know why she had decided to keep the schools open while the other districts closed. Sure enough, when Goldman got to the school administration building around 7:00am there were already three voicemails and ten emails from upset parties demanding an explanation for her decision. She felt obliged to reply to each complaint, but having to explain her decision made her realize how much of it was simply a best judgment call— a call that could have (and maybe should have?) gone the other way. It was going to be a long day— emotionally and physically — and she definitely needed to make another pot of coffee.

Business Owner/Parent Makes Snow Day Sacrifice

Tom wakes up at 7:30 am and immediately turns on the TV. Although Tom's routine is normally to wake up at 8:00am, he got up early this morning because the previous night's weather forecast called for a potential snow day. Potential snow days cause a lot of stress for Tom. He owns his own business, Greenhouse Printing, which gives him flexibility with his schedule but, when school is closed, Tom often has to close the business in order to take care of his three kids.

The school district Tom's kids are a part of, Baldwin School Districts, normally makes decisions to open/close the schools very early in the morning (often around 5:00-5:30am). Last year, Tom and his wife enrolled for an automatic calling system that would notify them by phone every time there was a potential snow day informing them of the school's decision. Tom and his wife found this system very annoying and didn't enjoy being woken up so early by the phone ringing. This year they've decided to disenroll from the system in order to get better sleep.

This school year has been particularly hard for Tom. It has been colder and snowier than normal, meaning that there has been a lot more school closures than normal. In addition to this, there have been a few days when Tom closed his business the night before because he believed that there would be a snow day the following morning. When the schools didn't end up closing Tom felt doubly wronged: not only did he feel his children were in danger going to school in the bad conditions, but he also felt like he "wasted" a day of business— and he's not sure how many of those he can afford.

On the opposite hand, last week Baldwin Schools stayed open in what Tom thought was the worst winter day they'd had so far. Tom worries a lot about the windchill outside (is it safe for the kids to wait for the bus?) and that morning it was bitterly cold. Although he was apprehensive, Tom sent his kids to school anyway, but when his youngest daughter slipped on some ice and broke her finger, Tom felt very upset at the school administration for making what he thought was a bad call.

So, this morning, as Tom watches the news for the school closure listings, he's apprehensive. Although he really wants to trust the Baldwin School Administration he doesn't really know them that well and he's starting to doubt their judgment. Around 7:40am, he sees his children's school roll around: they're closed.

Shutting off the TV in frustration, Tom starts calling all the clients he was supposed to meet that day. Since it's early, many of them are still in bed but he needs to get the calls off soon so that people don't start driving to his office in the snow. While he's thinking about all the money he's not making that day and all the appointments he's going to have to reschedule, Tom goes outside to shovel the driveway. While he's shovelling he thinks to himself "It's not that bad, the kids totally could have made it to school!" For a few minutes, he considers sending an angry email to the school administrators: why was school closed today?



PROTOTYPE [1]

In the first round of prototyping, our team constructed low-fidelity prototypes of a mobile interface for both administrators and parents. Below are pictures of each interface, accompanied by brief explanations of the screens functionality. After introducing the prototypes, we will show the results of user testing with these prototypes and how we translated those experiences into design prompts for the next iteration of design.

ADMINISTRATOR INTERFACE

On the morning of a potential snow day, administrators would use this application to check weather conditions, make a decision about school closures, and notify the public of those decisions.

1. Login— Administrators would use this screen to login to Are We Open (in this draft, named Is it Open?). Pressing login takes you to “Home.”

2. Home— From this screen, administrators can see the current algorithm number compared with their school’s threshold number.

3. Account button detail— Pressing this button allows administrators to log out of the application and/or edit their account settings (available from every screen).

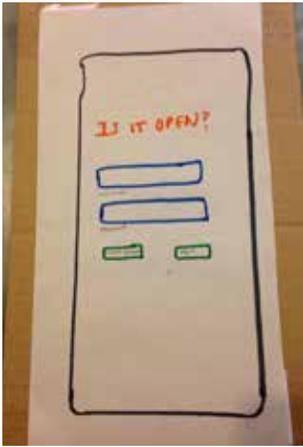
4-5. View Data— Pressing this button allows administrators to see a break-down of factors that went into the decision. The warning notification pops up when a certain factor meets or exceeds the “failsafe” limit set by administrators during application setup (i.e., some schools always close for windchill exceeding negative 10 degrees).

6-7. Look at Other Districts— This option shows a map pinned with data from neighboring schools. During interviews, administrators talked about how they use other schools’ decisions to inform their own. This map would show what other school districts are doing and their current algorithm numbers.

8-9. Call Local Superintendents— This screen affords quick communication between local superintendents. User interviews suggested that superintendents often consult each other

when making decisions. This feature was added to support this user behavior.

10-12. Make Decision— From this screen, administrators can make a decision about a school closing and write a brief explanation for their decision. Once their decision is made, administrators can quickly notify the public of their decision. Once they push send, a confirmation box (11) pops up and, if confirmed, a feedback box pops up (12).



1. Login



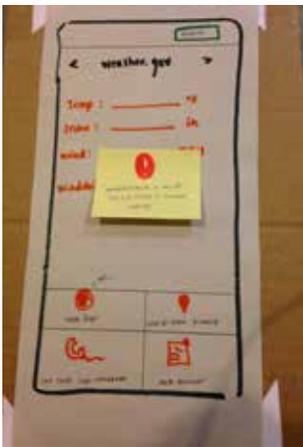
2. Home



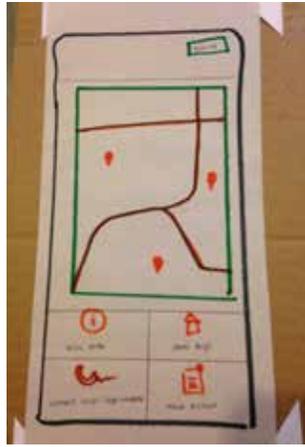
3. Home (w/ account button pressed)



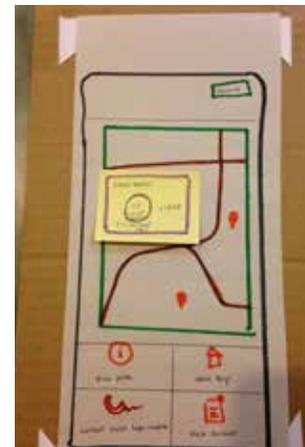
4. View Data



5. View Data (w/ warning notification)



6. Look at Other Districts



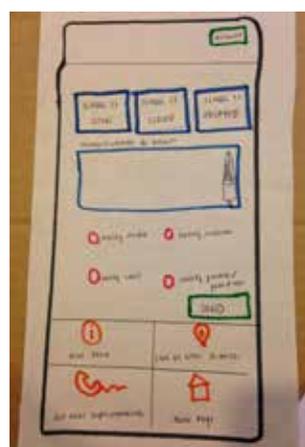
7. Look at Other Districts (w/ local school data)



8. Call Local Superintendents



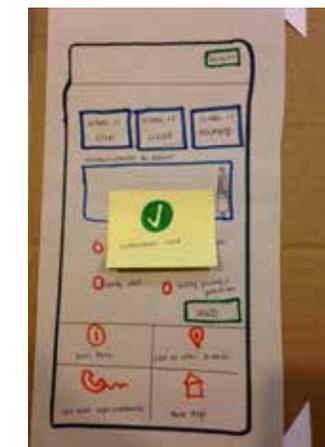
9. Call Local Superintendents (w/ calling detail)



10. Make Decision



11. Make Decision (w/ confirmation box)



12. Make Decision (w/ positive feedback box)

PARENT/STUDENT INTERFACE



1. Login



2. Home



3. Home (w/ school input system)



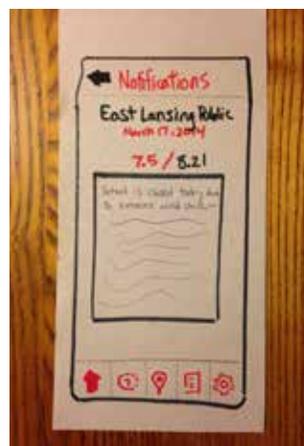
4. Threshold



5. Map (showing local school information)



6. Notifications



7. Notifications (detail view/ explanation of decision)



8. Settings



9. Settings (detail view of alert preferences)

On the morning of a potential school day, parents and students would use this application to check what decision their school had made and what factors went into that decision. Based on their individual preferences, parents and students would also use this application to be notified of the decision when it happens.

1. Login— From here parents/students would login to the system.

2-3. Home— After logging in, parents/students would be shown this screen where they could select or add (3) a school district.

4. Threshold— After pressing their school of choice, parents/students would be shown this screen. From here they can see the current number (compared with the threshold number) and the decision of the school district. They can also see the explanation of the decision (7).

5. Map— If parents/students want to see what decision districts around them have made, they can navigate to the map screen and see local data.

6-7. Notifications— Once the school has made a decision on a potential snow day, the notification would get logged here. Students can click on each notification to see an explanation for the decision (7).

8-9. Settings— From this screen, parents/students can set notification preferences (9) and edit their username/password information.



FIRST-ROUND USER TESTING

Testing Process

After constructing the first-round paper prototypes for the administrator and parent/student interface, we asked a school superintendent and a parent of two children to interact with the prototypes. After explaining a little bit about the project and giving them a sample scenario, we asked them to complete various tasks using the prototypes and filmed their interactions in order to see where they struggled and where they had successes. We also asked them to predict what they thought would happen if they hit a button and collected their general impressions and recommendations about the system.

While both of these sessions were useful, we focused most on the session with the parent of two children. Our team decided to focus most of this interface because it would be the interface used by the most people. The administrator interface, although important, would only be used by a small group of people whereas the parent/student interface would be used by many. Thus, we decided to develop the parent/student interface more moving forward, but to leave the administrator interface for another project.

Therefore, in this section of the report, we will focus on identifying key design discoveries generated from this user testing. Then, in the next section, we will talk about how those design discoveries impacted our second round prototype.

User Interview Take-aways

1. User thought the symbol we were using to represent the threshold number visualization was a clock— and was thus unsure what would happen if the button were pressed.
2. User thought the notification symbol was going to be a list of the data that went into the decision instead of a history of school closing decisions.
3. Inconsistencies in our design prototype (i.e., school is open in one screen and closed in another) confused the evaluator.
4. When adding a school, user searched for school name (i.e., Glencarin Elementary) instead of school district name.
5. User commented that the map screen might be helpful but that she probably wouldn't use it because her school district wasn't close to any other school districts.
6. User recognized the home/settings icons easily.
7. In the settings screen, the user was unable to predict what would happen if you pressed alerts and mistakenly thought that privacy meant setting a password for each screen.
8. User was able to correctly interpret the detailed alert preferences screen.
9. When the user was on the home screen, she commented that if she saw the threshold number visualization there, she probably wouldn't click any further. This was problematic for our design because the user wouldn't know for sure if the school was open/closed/delated without clicking to the next screen.

PROTOTYPE [2]

PARENT/STUDENT INTERFACE

APPENDICES

In these appendices, our team will provide copies of documents used during our research process, including: (a) interview scripts (used to assess the design problem); (b) evaluation protocols (used to refine prototypes); and (c) images from our affinity diagramming process (used to distill system requirements for the first user interface prototype).

INTERVIEW SCRIPTS

Administrators

How long have you been in this position at this school?

How often (as best you can remember) did the school close for snow days this past academic year?

Tell me a rough outline of the snow day decision making process. What's your state of mind when making this decision (i.e., groggy, tired, nervous, excited)?

Who's involved in the snow day decision making process?

What information source(s) do you consult when making a snow day decision? How do you use them in your decision? Why those sources?

What's your timeline for making and announcing a snow day decision?

What communication outlets do you use to deliver news of a snow day decision?

How confident do you feel in the decisions you make?

Have there been any decisions that were really hard to make (where it was up in the air whether or not you should have school)? What was the deciding factor?

Has your school had any public backlash against snow days (i.e., parents complaining that schools close too much, parents complaining that it's too dangerous to have school, etc.)?

How does the school respond to that backlash?

Tell them a little bit about what we're designing. What would this application need to calculate in order for you to trust it? What information sources would it need to use?

Parents

How many kids do you have? What are their ages? What school(s) do they attend? How long have they attended there?

How do your kids get to school?

Tell us a little bit about your normal routine in getting your kids ready for school.

How does a snow day affect that routine?

How do you hear about snow day decisions? Do you think that's a useful way to hear about decisions?

When do you hear about a snow day decision? Is that a good time for you? If so, why? If not, what time would be best?

If it's a questionable snow day, and the schools decide to open, how do you decide whether or not you will allow your child/ren to go to school?

What factors are the most important when you consider whether or not to send your child to school?

How do you think the snow day decision is made?

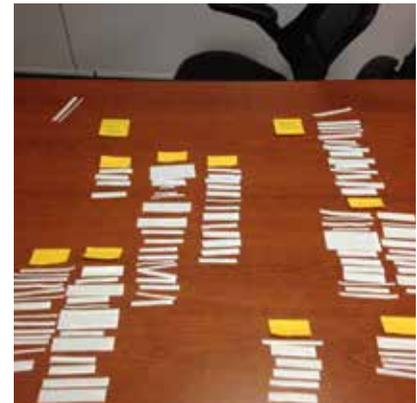
Have there been any snow day closing/opening decisions that you've disagreed with? Why did you disagree?

Do you feel like the school takes your opinion as a parent seriously when it makes school closing decisions? Do you think there are ways for you to participate in the decision making process?

Tell them a little bit about what we're designing. What would this application need to calculate in order for you to trust it? What information sources would it need to use?

AFFINITY DIAGRAMMING

After conducting user interviews and field observations of the design problem, we used segments from the interview segments, social media posts, and blog articles to conduct an affinity diagram. The results of this affinity diagramming process helped determine system requirements for our design prototypes.



After grouping the interview segments, we identified the following as second-tier labels: safety (including driving safety and student safety outside), decision factors (including weather-related factors and non-weather related factors), priority of factors (which varied from school-to-school), information sources (including human and non-human information sources), school closing notification timelines (including differences in administrators' and parents' timelines), child care issues, and decision aftermath (including public backlash and administrator confidence).

From this tier of labels we consolidated into three top-level categories, including administrator/parent confidence (combining safety and decision aftermath), information synthesis and validity (combining decision factors, priority of factors, and information sources), and notification flexibility (including notification timelines and childcare issues).

Using these three labels as a design guide, we determined that the system requirements for this application would include:

1. Transparency in the decision-making process (to increase administrator/parent confidence in the decision).
2. A combination of information sources with the ability to flexibly prioritize certain factors.
3. A customizable system for parent notification (both time and method).

EVALUATION PROTOCOLS

USER TYPE: ADMINISTRATOR | PROTOTYPE TESTED: VERSION 1

1. Explain Background of Is It Open

The design problem we are attempting to solve is the subjectivity, uncertainty, and negative reactions surrounding snow day closures. We wanted to give administrators a way of making the snow day decision-making process more objective and more easily communicable to parents, students, and community members. We also wanted to give parents a greater sense of security in snow day decisions and a flexible method for being notified of snow day-related school closures. Today we are bringing a very early prototype of such a design for your evaluation. As a subject matter expert in your role as school administrator, your feedback is very valuable and helpful for us in making this prototype better. We are already aware of a number of flaws in the system— so please feel free to be honest in your feedback.

Is It Open? is based on the idea that a computer/mobile web application could be automatically fed weather data from local/national weather sources. This information would then be fed into an algorithm (not being tested in this phase) that would calculate the safety level of the weather conditions on a scale from 1 to 10 (1 being no real threat and 10 being lethal road conditions). School administrators (with input from the community) could set in advance their school closure threshold number (i.e., “Our school district will close school for a threshold reading of 8.5 or higher— unless there are other outstanding factors”). On the morning of a potential snow day, administrators could run the calculation, get the number, accept/override the suggested opening/closing, and communicate that decision to local media, students, and parents. This will hopefully take some of the burden off of administrators and make the entire process more objective and transparent.

Today, we are testing the portion of the application that administrators would use on the morning of a potential snow day. The tasks we’re going to ask you to do assume that you’ve already set up an account with the system and set the specific parameters (including the closing threshold number) for your school district. We will ask you to work with these paper prototypes as you would with any mobile/computing device. When you touch a button, enter information, etc. we will provide another paper model that approximates what would have happened had you performed that action on a live prototype. Throughout the walk-through we will ask questions about your expectations in order to identify where our design lacks clarity. At the end, we will ask additional reflective questions about your perception of the design as a whole and what you think could be done to improve the prototype.

2. Task-Based Prototype Evaluation

1. Show first screen. Pretend it’s the morning of a potential snow

day. You open the Is It Open? application and this is the first screen you see. What would you do?

2. Here you are presented with a visualization and some buttons that allow for future action. What’s your understanding of the visualization?

3. What actions do you want to do next?

4. Where would you go to try to attempt those actions?

Based on desired action, see if the user can complete that action using the interface.

5. Move on to miscellaneous tasks. Be sure to have the user attempt to a) notify the parents that school is closed, b) confer with another school’s superintendent who is making the opposite decision, c) view temperature information for their school district, d) log out of the application.

3. Closing Questions

1. On a scale from 1-10 (1 being extremely difficult and 10 being extremely easy), how intuitive did you find this prototype to be?

2. Based on what you’ve seen so far, would you ever be interested in using something like this application? What would you need to know more about? What concerns/hesitations do you have?

3. What, if any, parts of the snow day decision-making process do you think an application like this one would help address? Where do you feel like there will still be difficulty in the decision making process?

4. Were there any final comments you wanted to make (either about the prototype or your snow day decision-making process)?

EVALUATION PROTOCOLS

USER TYPE: PARENT/STUDENT | PROTOTYPE TESTED: VERSION 1, 2, FINAL

1. Explain Background of Are We Open

The design problem we are attempting to solve is the subjectivity, uncertainty, and negative reactions surrounding snow day closures. We wanted to give administrators a way of making the snow day decision-making process more objective and more easily communicable to parents, students, and community members. We also wanted to give parents a greater sense of security in snow day decisions and a flexible method for being notified of snow day-related school closures. Today we are bringing a very early prototype of such a design for your evaluation. As a subject matter expert in your role as school administrator, your feedback is very valuable and helpful for us in making this prototype better. We are already aware of a number of flaws in the system— so please feel free to be honest in your feedback.

Is It Open? is based on the idea that a computer/mobile web application could be automatically fed weather data from local/national weather sources. This information would then be fed into an algorithm (not being tested in this phase) that would calculate the safety level of the weather conditions on a scale from 1 to 10 (1 being no real threat and 10 being lethal road conditions). School administrators (with input from the community) could set in advance their school closure threshold number (i.e., “Our school district will close school for a threshold reading of 8.5 or higher— unless there are other outstanding factors”). On the morning of a potential snow day, administrators could run the calculation, get the number, accept/override the suggested opening/closing, and communicate that decision to local media, students, and parents. This will hopefully take some of the burden off of administrators and make the entire process more objective and transparent.

Today, we are testing the portion of the application that parents would use on the morning of a potential snow day to a) be notified of the schools decision and b) understand why a decision was made. We will ask you to work with these paper prototypes as you would with any mobile/computing device. When you touch a button, enter information, etc. we will provide another paper model that approximates what would have happened had you performed that action on a live prototype. Throughout the walk-through we will ask questions about your expectations in order to identify where our design lacks clarity. At the end, we will ask additional reflective questions about your perception of the design as a whole and what you think could be done to improve the prototype.

2. Task-Based Prototype Evaluation

1. Show first screen. Pretend it's the morning of a potential snow day. You open the Are We Open? application and this is the first screen you see. What would you do?
2. Once you login, you would see this screen. What do you think

you can do from this screen? What would you do next?

3. Here you are presented with a visualization and some buttons that allow for future action. What's your understanding of the visualization?
4. What actions do you want to do next?
5. Where would you go to try to attempt those actions?

Based on desired action, see if the user can complete that action using the interface.

5. Move on to miscellaneous tasks. Be sure to have the user attempt to a) see map that indicates other school information, b) set up the preferences of notification alert(s) when the decision being made , c) view the reason for decision made, d) log out of the application.

3. Closing Questions

1. On a scale from 1-10 (1 being extremely difficult and 10 being extremely easy), how intuitive did you find this prototype to be?
2. Based on what you've seen so far, would you ever be interested in using something like this application? What would you need to know more about? What concerns/hesitations do you have?
3. Do you think that an application like this one would help you understand the decision made and go through a snow day? Where do you feel like there will still be difficulty in understanding the decision made by using this application?
4. Were there any final comments you wanted to make (either about the prototype or how the application helps you walk through a snow day)?