

Miracle Workers: Andrew Bradley, Alethea DeSoto, Jane Sim, and Kate Wilcox
IST 522: Dr. Rosalie Strong and Dr. Miguel Lara
Job Aid Assignment, Step 2: Proposal
September 17, 2013

Our goal was to create a procedural job aid to provide just-in-time assistance to someone pumping air into their tires at the gas station. Alethea led the analysis of our target audience: English and Spanish speakers with a 6th grade literacy level in either language, an age-range of 16 to 90 years of age, of good health and standard physical abilities, who are car drivers with zero to a lot of previous experience using an air pump. This analysis greatly informed the first draft of our written instructions.

Once the first draft of written instructions was created, Andrew went to a gas station and performed the process of pumping air into his tires while following the written instructions and taking photos of the process. This activity served two purposes: it provided a formative evaluation of our first draft and it produced images for the development of the job aid. Andrew made suggestions based on his experience using the written instruction. We made some suggested changes but not all. At this point, each team member had their own preferences for how to word the instructions and we compromised on many details.

After a few drafts were developed of the job aid, we needed to move forward with the Spanish translation and formal evaluation process. We ran into a challenge with the Spanish translation aspect of the process, because it was too time consuming for Alethea continually update the translation. This closed off the revision process. On the one hand, we could have waited until after testing to do the translation in order to free-up revision. On the other hand, it is important to have the Spanish translation available to test.

Kate led the testing process. Due to time constraints, she conducted the following limited usability tests with representatives of the target audience:

- Test 1: Asked expert to read instructions and provide feedback
- Test 2: Asked non-expert to read and follow instructions at pump station (Andrew had an additional non-expert read and follow the job aid)
- Test 3: Asked two gas station clerks to read instructions and provide feedback

Summary of feedback:

- Need major revision of step 1, because PSI indicated on tires is not recommended PSI
- Lacking information such as recommendation to wait until tires are cold before pumping and how to release air if you over-inflate
- Some steps apply only to specific gas stations
- Too many steps

- Increase overall size
- Photos are nice but misleading when image doesn't match equipment at specific gas station
- Description of hissing sound is helpful

Due to time constraints, the only revisions we were able to make based on the feedback was to increase the size of the job aid and reduce the steps from 8 to 7. It was eye-opening to see that even with a thorough analysis, plenty of initial revisions, and a formative evaluation, much more time should have been set aside for revision after the formal evaluation. This was especially true because the formal evaluation revealed that bigger changes than re-wording steps needed to be made. We would need to re-imagine a more generalized set of instructions in order to accommodate every gas station's air pump specifications.

This is how we would further revise our job aid:

- Focus on most important steps
 - Determine target PSI
 - Check pressure before pumping air
 - Pump air, or remove air
- Either make instructions more generic, or state that they only apply to certain types of pumps
- Make photos larger
- Include no more than 5 steps
- If we place a sign at the side of the pump station (where it would be visible when pumping air), consider using photos only. Text is difficult to read from a distance.

Tasks Performed (Entire Duration of Project):

Andrew Bradley	Constructed task list	20 minutes
	Edited assignment #1 and #2	20 minutes
	Participated in three group video conferences	90 minutes
	Formative testing/took photos for job aid	45 minutes
	Provided feedback/edited job aid written steps	30 minutes
	Created first draft of job aid with pictures added	45 minutes
	Performed summative evaluation	30 minutes
Alethea DeSoto	Observed customers at gas station	30 minutes
	Researched	15 minutes
	Wrote up information from observation/research	30 minutes
	Participated in three group video conferences	90 minutes
	Performed additional research for writing job aid steps	30 minutes
	Wrote first draft of written job aid steps	30 minutes

	Provided feedback/edits on subsequent job aid drafts	15 minutes
	Translated written steps into Spanish	30 minutes
<i>Jane Sim</i>	Wrote and submitted assignment #1	20 minutes
	Collected contributions and edited proposal for step 2	40 minutes
	Participated in three group video conferences	90 minutes
	Provided feedback/edits on initial job aid drafts	15 minutes
	Created draft 2 and subsequent drafts of job aid	45 minutes
	Collected contributions and edited this final report	45 minutes
<i>Kate Wilcox</i>	Evaluated air pump stations at Shell & 7-11	30 minutes
	Wrote up findings and notes on format possibilities	40 minutes
	Participated in two group video conferences	60 minutes
	Provided feedback on job aid draft	20 minutes
	Led summative evaluation and reported to group	60 minutes

AIR PUMP INSTRUCTIONS

1. Determine correct amount of air pressure

The numbers on your tire followed by "psi" indicate the amount of air needed.

Determina la cantidad correcta de presión de aire

Los números en la llanta seguido de "psi" indican la cantidad de aire.



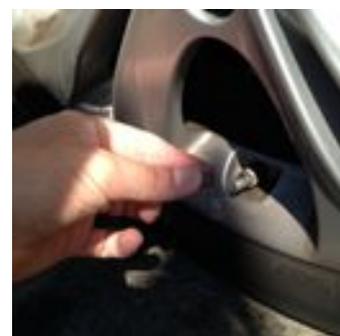
2. Locate the stem cap on your tire

Localice la capa de la roda en la llanta



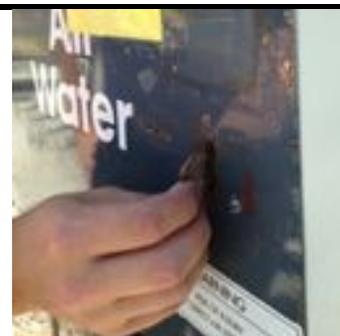
3. Remove cap from stem and place in a safe location

Quite la tapa de la roda y coloque en un lugar seguro



4. Place quarters into machine to begin pumping air

Coloque monedas en la máquina y comenzar a bombear el aire

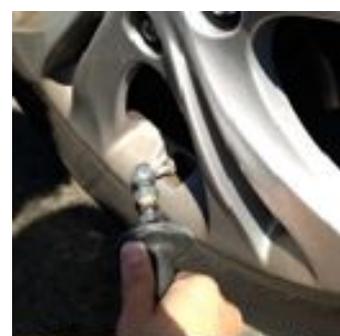


5. Insert hose to begin pumping air

Attach it firmly to the head of the stem and push down evenly. If you hear a hissing sound, simply reposition the air hose until it is properly placed on the stem.

Meta la manguera para empezar a bombear el aire

Fije firmemente a la cabeza de la roda y empuje hacia abajo de manera uniforme. Si escucha un sonido, simplemente cambiar la posición de la manguera de aire hasta que esté colocado correctamente en la roda.



6. Release trigger to check gauge every 15 – 30 seconds

Make sure you are not over or under your target psi.

Suelte el gatillo para comprobar calibre cada 15-30 segundos

Asegurarse de que no está mas ni menos debajo de la "psi" targe.



7. Don't forget to replace the cap back on your tire stem!

No olvide volver a colocar la tapa de la roda de su llanta

