INTE 6710 Infographic Design Documentation

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Infographic Focus

This infographic was created with the primary goal of educating out-of-town visitors to Scottsdale and Phoenix, Arizona, who are unfamiliar with Camelback Mountain, (a popular mountain and destination named because it's appearance is that of a Camel resting in the middle of the city) the dangers this extremely difficult hike may present, and how to prepare for a fun and safe hiking experience. If done well, this infographic will aid in the reduction of rescues performed on Camelback Mountain and will serve as a tool for hotel concierge and other resort staff to use in guiding guests at the many resort hotels in the surrounding the area.

The Problem(s)

This infographic addresses multiple problems.

- 1. Too many Emergency Responder rescues. Of all the popular hiking areas in the Scottsdale and Phoenix, Arizona areas, Camelback Mountain historically requires the most emergency responder rescues (via ground or air support) Rescues are expensive and are paid for by the tax payers. Rescues require 12-15 people on average between the command center and actual responders, putting them out of service for long periods of time during a rescue.
- **2. Out-of-Town Visitors**. Upon interviewing the manager of the Technical Rescue program for the Phoenix Fire Response Team, it was confirmed that on average over 90% of those rescued on Camelback Mountain are out of town visitors who were simply unprepared and unaware of the difficulty of the hiking there, the dangers of the desert heat and sun exposure, and proper gear/clothing required. More often than not, they simply don't know how to prepare for a desert hike.
- **3. Resort Staff.** There are many resorts in the surrounding area. Camelback Mountain is listed as one of the "Top 10 Things To Do" in visitor guides. Hotel concierge and other resort staff, have a reputation for directing visitors to explore Camelback Mountain but not armed with any details on how to prepare and stay safe.

Learning Objectives

- Learners will prepare and begin their hike with proper gear, clothing and supplies.
- Learners will be able to assess their own hiking abilities so they are better prepared to hike Camelback Mountain.
- Learners will avoid finding themselves in a rescue scenario.

Audience

The Primary audience considered in the creation of this infographic, is out-of-town visitors to Scottsdale, Phoenix and surrounding areas in Arizona.

Camelback Mountain is situated in the heart of a major resort town, Scottsdale, Arizona, where the economy is sustained by tourism. Because hiking Camelback Mountain is listed as a "Top 10 Things To Do" item, it usually ends up on the list of activities for visiting tourists. Emergency responders perform more rescues on Camelback than any other hiking destination in the area every year, and more than 90% of rescues for those visiting from outside of Arizona. Rescue scenarios are typically due to heat exposure and lack of preparedness for hiking in the desert.

The secondary audience are those in professions who interact with out-of-town guests, mainly hotel concierge and other resort staff in the Scottsdale and Phoenix, Arizona areas. It is imperative that they understand the need for people to be prepared properly and aware of safety issues related to hiking Camelback Mountain before making recommendations to go there. (Proper gear and clothing, desert heat and sun exposure education, etc.)

Tools, Technology and Distribution

This infographic was created with the Adobe Creative Suite. (Adobe Illustrator, Adobe Photoshop and Adobe InDesign). The size is 11x17 in vertical format which allows it to be printed and displayed. It is also saved as a PDF and distributed and available for view electronically as well as posted on various web sites.

Distribution channels

This infographic is appropriate for distribution in many channels both in printed and online formats including:

- Hotels (heavy focus on concierge).
- Displayed on-board and on the web-site for free Scottsdale Trolleys that drop people off near Camelback Mountain.
- Phoenix and Scottsdale Parks and Recreation Foundations web sites and events.
- City of Scottsdale and City of Phoenix web sites and visitor centers.

Design Decisions

I've worked on graphic design projects often in my career, but this is the first time I've had to break down and backup design decisions that have been made in a document format. After going through the exercise, I see the value. In my experience, it is not uncommon for people to join a project toward the end and demand unnecessary changes and edits, just for the sake of making changes and putting their thumb print on it. While I agree that feedback is extremely important and when given well, can help push a project to be the best it possible can be, in those times where feedback given may not be in the best interest of the project, it's easier to rationalize that point with a solid document behind it detailing design decisions and backing them up with resources. This section is intended to discuss five design decisions that were made while creating my infographic, and the rationale behind these decisions.

Design Decision #1 - Color Palette

I created a color palette inspired by and representational of the infamous Arizona sunsets. Because the sky there is often lit up with a large variety of colors, my goal was to narrow down a palette of no more than 6 colors to use throughout the infographic. An initial Google search for "desert color palettes" was conducted which led me to illustrator/designer, Sarah Renae Clark. Clark has created 25 color palettes that were inspired by beautiful landscapes. Palettes of Clark's that I used specifically for inspiration were "Color-palette-052-rock-arch," "Color-palette-068-sky," and Color-palette-071-road-side." These palettes can be seen in the appendix.

Next, I did an online image search of "Arizona sunsets." This is where the colors that I was envisioning for my palette were confirmed. I was especially influenced by an image located in an online article called "Best Time to View Sunsets in Arizona." Unfortunately, the photographer was not cited in the article. The colors shown in the sky here, were used as a model for the sky that I created in my original illustration used in the top portion of the infographic. This photograph is shown in the appendix.

Between my palette searches, Arizona sunset photography searches, and my Pantone Color Bridge book, I came up with a palette of my own, comprised of vibrant blue and oranges tones, tan, gold, brown and deep green.

Design Decision #2 - Illustration

I was compelled to create an original illustration for the feature image of my infographic, showcasing Camelback Mountain. Within the assignment, all other graphics shown are original, and created in Adobe Illustrator, with the exception of, the hiking boot, granola bar and cell phone in the "Be Prepared…" section. These graphics however, were purchased royalty free through dreamstime.com and then manipulated (Adobe Illustrator) by editing colors in addition to adding text to the cell phone to better match the overall look and feel.

I spent over forty years looking at Camelback Mountain every day when I lived in Arizona, and know it's shape well, however images were used for reference to verify the shape of the mountain. I have always been fond of the western-inspired landscapes of artist, Ed Mell. I revisited his works, and gave a nod to him in the way that I styled the sunset sky and clouds in my feature image. Examples of Mell's work are shown in the appendix.

Design Decision #3 - Structure of Layout

I realized that I had a lot of information to present, so in my effort to corral information by "type," (rescue stats, what to bring/wear, trail comparisons, etc.) I decided upon a grid-like layout structure, however I did not make it rigid. Rectangular sections of varying sizes were created to house information that belonged together. The background colors of the sections vary to differentiate them. In addition, a simple, thin white bar is placed around the edges of the sections to reinforce where they begin and end and separate them from the next section of information. The sections do not require to be viewed in a set order, and seeing as the information amount varies per section, the height and width of the rectangles adjusts to fit each individually. As Hampton-Smith (2017) reminds us, "Don't get caught up in using a grid too rigidly – some of the best designs break all the rules of grid layout and are all the more successful for doing so." (Conclusion section para. 1). My intent was to implement a grid, however not do so in a cookie-cutter way. Martin (2016) reiterates this point by explaining, "Whether you're developing the UI for a website or an app, creating the spread for a magazine, sketching out a poster design, or simply just want to create a visually harmonious doodle, the key is to approach the grid as a strong suggestion—but not as a standard."

Design Decision #4 - Font

I selected two san serif fonts, Intro and Helvetica Neue Condensed, to be used in the infographic. Because the project has a lot of text, it was important that it be easily readable, and doesn't strain the eye of the viewer by using too may font styles. I gravitate toward san serif fonts without embellishments attached to letters for projects like infographics that don't require long paragraphs and pages of text. Taylor-Mighty (2017) suggests that san serif fonts are not only "better for section headers, captions, lists and titles in an infographic," but that graphic designers now "tend to use them for body text as well."

Next, and because there is a lot of text necessary, I implemented hierarchy to various components of the text throughout the infographic. This strategy allowed me to highlight and call out important facts and nuggets of information by adjusting the size or color to draw attention to it. Sanchez (n.d.) spells out why hierarchy is important in graphic design, "Hierarchy is only one of the tools on a designer's tool belt, but it's one of the most important. Having hierarchy in your design helps differentiate and prioritize visual elements and content so the human mind gets a sense of what's more important and what needs to be consumed first." In my infographic, it is important for out-of-town visitors who hike Camelback Mountain to understand the degree of difficulty and preparation involved before going there. An example of where I used hierarchy to emphasize points in the "You Should Know:" section is by making the words "air rescues... at Camelback Mountain" larger, bolder and a differentiated by color. It was important for viewers to realize that the need to be rescued is not out of the realm of possibility. This size-strategy is discussed by Sanchez (n.d.) saying, "At a first glance, larger things generally grab the most attention. Therefore, a great tactic to move up an element the hierarchy is to make it bigger."

Design Decision #5 - Size

I chose 11"x17" (tabloid) portrait orientation as an ideal size for this project. It's common to see infographics that are not built to standard print sizes, because many of them will only be viewed online. This infographic however, has several distribution channels including print, so it was important to create it in a standard U.S. paper size so that distribution channels may print in-house or have the opportunity to remain cost-effective if getting the infographic is professionally printed. Formax Printing Solutions (n.d.) puts is simply in that "The bottom line is that printing on common paper sizes is generally more economical than printing on less common paper sizes." They go on to say that because the world of printing revolves around standard sizing, "creative sizes could cost more."

For online purposes, the infographic will be housed on web sites and distributed via email. When printed, it will be displayed as a poster in locations such as hotel concierge offices. The 11"x17" tabloid format works well if the infographic were to be framed and displayed as a poster, as it is also a standard frame size. Displays2Go confirms that "Through extensive research, the most highly sought-after poster frame size options are determined to be 11 x 17, 16 x 24, 18 x 24, 20 x 30, 22 x 28, 24 x 24, 24 x 36, and 40 x 60."

The printed version of this infographic may also be distributed posing as a flyer, to out-of-town visitors planning to go to Camelback Mountain. The final infographic is shown in the appendix.

Formative Evaluation Response

This infographic was peer reviewed by two individuals. I posed five questions to them and welcomed additional feedback as they saw fit. Much of the feedback received from them was implemented and added great value to the project.

Peer Review Question #1

How might I better address the learning objectives?

It was important to me to find out through my peers if the learning objectives were met and made sense, seeing as there are people in Phoenix, Arizona that will distribute my infographic once it's done. If the information provided in my Infographic helps even one person to have a safer hike and avoid potential rescue, it would be a success.

Peer Reviewer A:

"I am going to answer this question by addressing the objectives themselves, especially the second one. Your second learning objective is a tad too long and general, I think. That is essentially what you are going for, but you want actionable and measurable objectives that learners will be able to learn or do as a result of reading your infographic. So, here are some ideas that I have for fixing that objective:

- Learners will be able to compare the different trails on Camelback Mountain.
- Learners will be able to assess which trail to take on Camelback Mountain.
- Learners will be able to identify the essential gear needed for a hike on Camelback Mountain.
- Learners will be able to reflect upon their own hiking abilities so they are better prepared to hike Camelback Mountain.

I think if you change the wording of the objectives, your infographic's design will naturally lend itself to the objectives. What you have created is awesome."

Peer Reviewer B:

"I think you have addressed your objectives really well both in terms of preparing the learners with the necessary gear and supplies and also with the needed information about the trails and dangers of the hike."

Question #1 Considerations:

In addressing my learning objectives, Peer Reviewer A offered thoughtful feedback that I applied to the project. The infographic design and objectives aligned much more seamlessly after doing this. I re-worded my second objective and then added a third based on his/her commentary.

Peer Review Question #2

At first glance, what does your gut say about the amount of "text" that is used?

I have seen a lot of infographics that are very text heavy, which can be a turnoff for the viewer and detour them from looking at it. Ideally I wouldn't put as much text as I did in my infographic, but because of safety issues and to stress importance, often statements I used called for an explanation.

Peer Reviewer A:

"Honestly, I think the amount of text is appropriate. It does not seem overwhelming to me. The only area that I would say to edit is the trail comparison section. For this part, maybe you just generalize the information and provide external links. Or, just reduce the list to the essential bits, which are probably: Difficulty, Elevation Gain, Distance, Estimated Time."

Peer Reviewer B:

"I'm ok with the text in white with the green background. If you are concerned about it being text heavy, I think you can cut out the entire first line and just start with "The Iconic ..."

"Going further down, I like how you have given a comprehensive comparison of both trails. Though it's a lot of text, I think it is relevant information that is useful for the learner."

"I agree that there is a lot of text but like I mentioned before, a lot of the information is relevant and needed."

Question #2 Considerations:

I understand Peer Reviewer A's suggestion to edit out parts of the trail comparison section. I revisited it, and then I stepped back into the viewer's shoes (out-of-town visitor to Phoenix area) before making the decision to leave the bullet points. The reason behind my decision is that all of the points are necessary so that a first time hiker at Camelback will know what they are getting into, how far they will be going, how long they may be gone so they may better plan the rest of their day. Things like parking may not seem like a big deal but it is once there. Similar with restrooms. The simple fact that restrooms are only available at the Echo Canyon trail head may be the deciding factor for someone in choosing which trail they will take. I toyed with taking out the "Dogs" information, but for many years, dogs were allowed there, then they stopped allowing dogs on the Echo side and only last year stopped allowing them on the Cholla side. It was a hot topic in the area and would be a shame if someone arrived there only to have to leave because they brought their dog with them.

I took the suggestion from Peer Reviewer B in editing the first line of the opening statement that rests in the dark green box under the feature image of the mountain.

Peer Review Question #3

Visually... I've illustrated almost all of this, but some of the "Be prepared" illustrations were found via stock and then I manipulated them. What are your thoughts about the illustration styles being slightly varied? (Top portion where the feature image is as compared to "Be prepared" section etc.)

I get hung up on visual consistency and get distracted when people choose too many different illustration styles when using stock vector art, or clip art, icons etc. I had a few small graphics in place in my "Be prepared" section that may or may not have been too dissimilar to the feature image illustration style. At this point in time, I was too close to it to decide, so I posed a question about it to my peers.

Peer Reviewer A:

"To be honest, I don't really notice that difference. I see what you are saying now that I look at it, but upon first glance I probably would even notice."

Peer Reviewer B:

"I'm not a hiker but maybe include a flashlight light and a first aid kit as one of the graphics. Also, do you need a map or compass or GPS? (I don't know – maybe that is common sense)"

"Truthfully, I feel the illustrations are not much varied. I think you did a great job manipulating the stock illustrations to work well in your infographic."

Question #3 Considerations:

I probably was over analyzing some of the graphics shown in the "Be Prepared…" section, and was relieved to hear that both reviewers agreed that the style and look and feel of the images I was asking about there, looked just fine, however, I altered a few of them anyway. I re-drew a new water bottle in a style that I liked better and added a second one after also showing my project to people close to this topic in Arizona and realizing that water (or lack thereof) seems to get people in the most trouble. I also found a new stock vector image of a hiking boot that I like better. I edited it slightly and changed the colors to match the rest of the infographic. I opted not to add a flashlight as suggest by Peer Reviewer B as it's shown in a sign graphic in the trail section that the trails are closed at sunset, so a flashlight would not be needed. The reviewer wouldn't know this, but in the spirit of not over packing for the hike and knowing how well the trails are marked, it's not really necessary to take first aid kits or a compass.

Peer Review Question #4

Curious if anyone has any better ideas on how to "word" the headlines and subheads of sections so they draw the viewer in and better support the objectives?

I don't think of myself as a copy writer, so it was important to see if the peer reviewers felt drawn in by headlines and captions and if they related back to the objectives.

Peer Reviewer A:

"For the top portion, I would probably rename it to say something to the effect of: "CAMELBACK MOUNTAIN: A HIKER'S GUIDE." It's a little less wordy and attracts a specific audience. For the section on the rescues (which, as an aside - that's a ton of rescues! This infographic would ideally make a huge dent in that!), maybe you should title it with something like: "DID YOU KNOW?" I like the heading for being prepared. For the trails section, maybe rename it to something like: "PICK A PATH" or "CAMELBACK HIKES." Everything toward the bottom looks good to me."

Peer Reviewer B:

"I'm drawing a blank. I think you have done a great job with the headlines and subheads, they are to the point and the learner can easily understand what each section is about."

Question #4 Considerations:

Peer Reviewer A was helpful here. I did not apply his/her first suggestion to change the title of the infographic to "CAMELBACK MOUNTAIN: A HIKER'S GUIDE" Although I understand his/her rationale that it would shorten it, changing the wording in that way and eliminating the words "visitors guide" is taking away the targeted viewer. People who live in the area and know even the littlest about Camelback Mountain won't need this infographic. They are well aware of the dangers, they see it on the news constantly, and their tax dollars fund the expensive rescue efforts. His/her comment also inspired me to add "out-of-town visitors" to the opening statement in the green box below the feature illustration. I felt like that was another opportunity to reiterate "who" the intended audience is. I did however, implement suggestions in the rescue section by adding "You Should Know:" and again below by the trail descriptions, I changed the heading to "Pick a Path."

Peer Review Question #5

How might I improve the way the sections are organized?

I had a lot of information to cover in an 11x17 space. It was difficult enough to weed down the information I had gathered to what is shown on the infographic, and seeing as though the information covers several types of topics (Rescue information vs. how to prepare vs. trail descriptions) it was important to see if the way the sections were divided up and displayed made sense to the reviewers.

Peer Reviewer A:

"The only suggestion that I would make here is to swap the trails section with the helpful tips that are currently below the trails. As I thought about this question, I decided that if I was a part of your audience, I would add the bit about trail etiquette with the trails section, which would be below the helpful tips. I don't think it's a huge deal, but I could see it working either way."

Peer Reviewer B:

"The next section – (this might be just me but here goes) it is natural for us to read left to right so I'm assuming the flow is left to right, but the section on the right is bigger-bigger visuals and font so that kind of grabs my attention first. And after looking at the bigger section somehow, I'm not as drawn in to go through the info on the left, my natural tendency is to look further down to the next section. I would suggest flipping the sections."

"The section below- love the little graphic on top of each box (I wish it was evenly spaced or centered on each box but I understand why you had to move it to the left for the first box and then did the same for the last). Again, this just might be me - I have issue with all the boxes not being evenly sized. The outer two boxes seem the same color and size, it's the inner two that kind of don't fit(also both have similar information). I understand that the sizes of the boxes varied with the information and it looks like you used a green box (you did not use green anywhere else) to try and balance out the green at the base of the mountain."

Question #5 Considerations:

Peer Reviewer A's suggestion to swap the trail section with the section(s) along the bottom was considered. Once moved, visually it didn't look right, so I left the trail section toward the middle. In reading his comment, I decided to change a heading that existing stating "Trail Etiquette Tips" to simply "Trail Tips." This way, I was able to add a few more important bits of information that didn't fall under the "etiquette" category.

Peer Reviewer B made some strong points about reading left to right and how his/her eye was drawn to areas where the fonts were bigger or there were visuals. In this case, reading left to right isn't crucial. Each section is designed to stand on it's own rather than read like a story, however... this inspired me to isolate the sections a big more by adding thin white bars between them to more clearly differentiate them. Having the viewer's eye be directed to bigger sized fonts and graphic was done on purpose. (See discussion about "hierarchy" above in Design Decision #4) These items are supposed to draw attention.

Per suggestion of Peer Reviewer B, I centered the icon graphics on the boxes where they sat and also adjusted the sizes of the boxes shown in that entire section. Of the four, the two boxes on the outside are now the same size and the two boxes on the inside are now the same size. I also added more green to the infographic by illustrating cactus graphics and placing them in the trail section. It turned out to be a great way to add more desert elements as well.

Lessons Learned

It's true that if you work on something that you feel passion for, you'll put more into it, and it won't feel laborious. I've only lived outside of Arizona for two years, and Camelback Mountain is one of the things I miss the most. I looked at it every day, and could see if from my home. I would worry when I saw rescue helicopers hovering over it. I left a lot of sweat on the trails there and spent a lot of quality time with friends on that mountain. This was a rewarding project in that not only did I get help and feedback from peers in my class, I had support and encouragement from people in Arizona that will be able to use and distribute this infographic, including those that work in the rescue teams alongside the Phoenix Fire Department. In my regular work-life, I don't have the luxury of choosing all of the projects I work on. Here, in choosing something that allows me to give back to the community where I lived in most of my life, I found myself more dedicated to it and putting in more effort.

Next, I learned the value of the design document for an infographic project. In an assignment like this, it helps to think through the decisions that are made not only visually, but around content. Having a document like this provides the designer a tool to use in defending decisions and citing resources. I have created similar projects before without the document component and have found myself in situations and discussions with clients where it would have been useful and perhaps prevented unnecessary changes and edits, keeping the project running more smoothly.

Bibliography

- Altamira Fine Art. (n.d.) Ed Mell [Ed Mell paintings featured on gallery web site]. Retrieved from http://www.altamiraart. com/artists/51-ed-mell/works/
- Arizona Hiking Tips. Take a Hike. Do it Right. (2017). Retrieved from https://www.visitarizona.com/arizona-hiking-tips
- Camelback Mountain [Digital image]. (n.d.) Retrieved from https://www.expedia.com/pictures/central-arizona/phoenix/ camelback-mountain.d502324/
- Clark, S. R. (n.d.). 25 color palettes that were inspired by beautiful landscapes. Retrieved from https://sarahrenaeclark. com/color-palettes-beautiful-landscapes/
- Cosmas, M. (2018, January 22). Email interview.
- Displays2Go (n.d.) Shop for Picture or "Poster Frame Sizes" Retrieved by https://www.displays2go.com/FramesBySize
- Dubnow, B. (2018, January 25). Phone interview.
- Formax Printing Solutions (n.d.) Want to Save Money on Printing? Paper Size Matters. http://www.formaxprinting.com/ blog/2010/01/looking-to-save-on-printing-paper-size-matters/
- Hampton-Smith, S. (2017 November 7). The designer's guide to grid theory. Retrieved from https://www.creativebloq. com/web-design/grid-theory-41411345
- Martin S. (2016 October 25). Principles of Design: Bringing Order to Chaos with Grid Systems. Retrived from https://www.ceros.com/originals/principles-design-grid-systems/
- Photograph of Arizona desert sunset. Best Time to View Sunsets in Arizona. USA Today 10 Best, 8 June 2017, https://getaway.10best.com/13184422/best-time-to-view-sunsets-in-arizona
- Sanchez, G. (n.d.). How To Create A Hierarchy With Fonts And Visual Elements To Tell One Story. Retrieved from https://piktochart.com/blog/how-to-create-a-hierarchy-with-fonts-and-visual-elements-to-tell-one-story/
- Sublette, M. (n.d.). Ed Mell Biography. Retrieved from https://www.medicinemangallery.com/Ed-Mell-Biography
- Taylor-Mighty, K. (2017, July 28). The Do's and Don'ts of Infographic Typography. Retrieved from https://blog.hubspot. com/marketing/infographic-design
- Welcome to Camelback Mountain. (2007). Retrieved from http://climbcamelback.com

Woo, K.J. (2016, April 15). Remember Arizona: 'Take a hike and do it right' Retrieved from https://www.azcentral.com/ story/news/local/phoenix/2016/04/15/phoenix-area-hiking-safety-do-it-right-campaign/83037350/

Appendix

Final infographic. Actual size is 11" x 17."



Appendix

Sarah Renae Clark color palettes.



Inspriation image from the article, "Best Time to View Sunsets in Arizona."



Works from artist Ed Mell and image of the head of Camelback Mountain used as inspiration for feature.















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