

Epidemiology and the Social Sciences

Think back to the last time you had a cold. How did you catch that cold? You may not know exactly when or where you made contact with the germs that infected your body, but you can probably come up with a short list of probable times, places, and people.

Understanding how the common cold spreads, and how it can be avoided, is an example of information that has come out of the field of epidemiology.

According to the Centers for Disease Control and Prevention (CDC), epidemiology uses scientific methods to examine the causes of health outcomes and diseases.

Epidemiology is the systematic study of the patterns, frequencies, and causes of health-related events in specific communities. While epidemiology is rooted in biology, it is also intrinsically tied to the social sciences.

The spread of communicable (or transmittable) diseases involves interactions among humans and populations and the cultural factors that influence those interactions.

For example, some diseases are passed from one person to the next via sexual activity. The beliefs and values governing regular sexual behavior in that culture might influence how quickly the disease can spread from one person to another.

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However, that culture's openness about discussing sexual behavior and the associated risks might influence whether people use condoms, get tested for diseases regularly, and ask their partners about their sexual histories — steps that ultimately help prevent the spread of certain diseases.

In a similar way, social norms that dictate how closely people stand to one another when talking may influence how quickly a contagious, airborne disease can spread from one person to another.

Epidemiologists may study whether covering the mouth when coughing or sneezing are normal behaviors. They may study social norms related to preventing the spread of disease, such as hand washing.

Epidemiologists are also concerned with the social institutions that shape the likelihood that the population would come in contact with disease on a regular basis.

Are people traveling individually by walking, biking, or driving, or are they in close contact in mass transit systems? Is medical care affordable and available to those who need it? Are measures taken to ensure water quality and sanitation?

Geography and interaction with the environment are also important factors affecting the spread of some diseases.

For example, countries with environments that are ideal for mosquitoes are often at risk for the spread of diseases that mosquitoes can transmit, especially if mass treatment or prevention measures cannot be quickly provided.

In the case of non-communicable diseases, such as diabetes or malnourishment, epidemiologists are concerned with the availability of resources.

Is food available? If so, what kinds? What might prevent the availability of good quality foods to certain populations?

Finally, epidemiologists must understand how to apply their research to influence changes in behavior that could have positive health effects.

This goes much beyond simply providing people information; epidemiologists are concerned with influencing the psychology of individual people.

This might include encouraging people to wash their hands more frequently, or reminding them to get a flu shot. In areas where quality food is available, how can people be influenced to cut down on processed, sugary foods? How can people be influenced to use condoms?

One of the greatest challenges facing epidemiology is the rapid communication of accurate information to prevent negative health outcomes.

This can be seen in the recent outbreak of the Zika virus in South and Central America, as well as the Ebola outbreak in certain areas of Africa. For this reason, it is vital that a social scientist know how to communicate clearly and directly to a target audience, supporting his or her message with research.

Employing good communication tactics will not only ensure that the audience hears your message, but that they understand the message and grasp the importance.

In this theme, we will use epidemiology to explore methods and best practices for communicating information related to the social sciences.

Tailoring the Message

For the purposes of your presentation, you will only choose one group of people to present to as your audience. Choosing the audience is incredibly important for communicating a message effectively, because a good presenter will tailor his or her message to the audience. How might the presenter do this?

Explanation of Concepts

An audience that works in a social science field will likely have a solid understanding of the concepts and terminology that are specific to your issue. In contrast, people who may simply have a need for, or may be influenced by, the applications of your research, might not have this knowledge. Neither group may have a complex understanding of the political history of a specific population of people, if that's what your research concerns. When explaining your research, it is important to identify what information the audience may need so that the explanation is clear but not oversimplified or too difficult.

Tip

Think back to when you were first researching the issue. What information did you need to fully understand the complexity of your social science issue? What concepts did you need explained? If the concept was very complex, how was it explained so that it became clear to you?

Drawing Personal Connections

A very helpful tip for fostering audience engagement is drawing personal connections between the audience and the issue. Your presentation should explain how the issue relates to them and why the research question concerns them. Answer these questions — then it's just a matter of explaining that connection to the audience.

Tip

In some cases, connection to the issue will be very obvious to the audience, in which case your focus can shift to explaining the benefits of answering the research question. In other cases, your audience might need extra help understanding how they are impacted. Step into the shoes of your audience for a moment to understand how much explanation you'll need to give them.

Incorporation of Resources

The resources that you have researched are used not only to bolster your own understanding of the social science issue but also to demonstrate to the audience that the issue is important. You can use your evidence to show the audience's connection to the issue.

If the "why should I care?" argument changes from audience to audience, naturally, the evidence you'll need to support that explanation will change as well.

Tip

This doesn't mean you'll need to find new resources, and it also doesn't mean that multiple audiences can't find the same information compelling. It *does* mean that you'll need to be wise about what data you choose to highlight and present to your audience. Ask yourself, what statistics might resonate with them? What facts will be persuasive?

Tools for Presenting Ideas

The tools outlined below engage the audience's interest, help break down difficult topics, and provide enough context to give them a well-rounded understanding of your issue and research question.

Analogy

Analogy are a type of comparison. When used fairly and effectively, they help readers by linking a complicated idea or concept with something readers already understand. For example, physicians have long compared the human heart to a pump as a means of helping patients understand that the heart pushes blood through the body the way a pump pushes water out of a faucet.

Example: *Currently, medicine in the United States approaches diagnosis and treatment too narrowly. A person can't understand a book by reading a single page. Sure, that person will get a feel for the book, but they can't possibly know how the story started or how it's going to end. Holistic medicine attempts to read the whole book. It approaches not only the body but also the mind, the spirit, and the person's context — past and present.*

Anecdote

An anecdote is a short, true story. There are many reasons a person might tell an anecdote. Many times anecdotes are used as the "hook" to get the audience interested right away, especially when the anecdote is amazing, funny, or emotional. In this way, anecdotes can also be used to set the tone or to jump-start the rest of the narrative by providing context for the higher-level information. Finally, anecdotes can tell a bit about the presenter. By relating one's own personal experiences, the audience may empathize with the speaker and care more about what he or she says next.

Example: *...So then she hands me one of the ducks that is hanging there. Now I'm standing in front of this street vendor holding a dead duck in one hand and a dead chicken in the other, gesturing — with either bird — toward what I actually need, which happens to be the rubber chicken that has been nailed to her kiosk. I have no way of explaining to her why I need that rubber chicken, I'm realizing, in either her language or mine. And I stop and look at my own hands waving these dead birds around in the air, and just start laughing. Then, so does she. We can't stop laughing. We laugh so hard that we cry, and other people walking by start chuckling too. Finally we're able to stop, and she takes the birds back from me, and takes me around the back of her kiosk and offers me some water to wash my hands with, still smiling. It's moments like that, moments that you couldn't have ever imaged experiencing... that's why I love travel. That's why travel is valuable for so many people. You don't know what you'll find, and that's exactly why it's important to go.*

Defining and Simplifying

We've all had that experience. We may have been in school, speaking to a friend or acquaintance, or listening to someone on television — the topic is too technical, and we can't follow what the person is saying. Once lost, it's very hard to pick up the threads of the concept again.

When presenting, keep in mind that you have been researching this topic for weeks. Your audience, on the other hand, will be learning about your entire research project within a matter of minutes. If they are not professionals in the field, they could be hearing this information for the first time. Consider the terminology that might need to be defined. If there are technical concepts, theories, or ideas that you plan to explain, consider how you might simplify them.

In contrast, if your chosen audience is made up of professionals working in the social science field, be careful not to oversimplify your explanations, as this may come across as patronizing. Considering your audience carefully will help you strike the right tone.

Example: *A lot of people believe that a bureaucracy is a bad thing. They think of it as an organization that has overgrown itself and can no longer function well, associated with phrases like "red tape." Certainly, that can happen; but it doesn't always. In the world of sociology, bureaucracy simply describes a sophisticated type of organization with specific characteristics, like levels of responsibility, and written rules. This distinction is important because in this context, bureaucracy isn't inherently a bad thing. In fact, it's necessary for organizations that grow past a certain size to structure themselves as bureaucracies in order to function.*

History

In some cases, a brief history of the issue will be necessary for the audience to understand why things are the way they are now. For example, in Theme: Exploring Social Science Issues we discuss the social institutions in India. It was necessary to explain the historical forces that shaped these institutions in order to explain how and why they have come to be the way they are, and also to understand how and why they are changing. If your social science issue requires some historical context, remember to keep it brief and relevant to the issue.

Example: *Most people associate high heels with women's fashion; in fact, this style has its origins in men's clothing. Heels were adapted to keep horse-riders' feet steady in stirrups. Heels then became a symbol of status, worn by both men and women. Later on, heels were thought to be too impractical for men but appropriate for women.*

Visuals

In many cases, visual information can be incredibly impactful during a presentation. These may contain photographs of people, statistics and figures, or simply key terms and takeaway points featured while you explain them. We will discuss creating effective visuals later in this theme.



Incorporating Evidence

While telling an anecdote is a compelling way to present your research, it will not be enough to get your point across. Imagine that you go to a car dealership and ask the salesperson which car you should buy. He smiles at you and points to a lovely car across the room. "That one!" he says enthusiastically and launches into a narrative about how much his friend loves that particular model. Would this story alone persuade you? Probably not, unless the salesman added evidence about car safety ratings, reliability, and fuel efficiency. The same is true for your social science issue. You will need to support

your presentation with evidence; specifically, you will need to use the information you gathered during the research investigation to explain the social science issue and why you think your research question is worth investigating. In this section, we explore how to incorporate your research.

Data, Facts, and Figures

Part of your presentation is explaining to your audience why this social science issue should matter to them and how it affects them. Using data from your research investigation can help you paint the picture of the social science issue. You might use data to explain "how small," "how detrimental," "how beneficial," or "how useful?" For example, how many people does your issue affect? If it affects a certain population, what percentage of that population? If data is gathered over time, what changes can be seen?

Remember to accurately represent the data. You should not "cherry pick" your data. This means that you should not pick only the statistics or figures that help you make your point, while ignoring data that provide contrasting information. In your presentation, give a well-rounded explanation of the social science issue and explain the data surrounding that issue as completely as you can.

Interviews, Surveys, and Questionnaires

Interviews, surveys, and questionnaires are other great resources to identify supporting evidence of your social science issue. These can be used to add emotion and humanity to a presentation because these resources often get at the "why" of a trend or data point. In other words, people are able to explain why they feel or act the way they do. Highlighting an individual story that represents the group can be used for the purpose of creating a narrative.

When using findings from interviews, surveys, and questionnaires, remember that there are limitations to these types of data. They are primarily able to assess subjective data, such as emotions, opinions, personal experiences, and self-reported habits, which participants do not report always honestly or accurately. Giving participants a limited number of possible responses funnels their answers into categories, and they may feel that none of the choices correctly represents what they want to say. Respondents can misinterpret the question, or a professional collecting information can misinterpret the response. Finally, your presentation of these types of sources can appear biased if not used correctly; for example, avoid singling out a narrative that is not representative of the entire sample.

Quotes and Conclusions from Studies and Reports

A well-written scholarly resource will list the authors' findings. If these findings succinctly summarize the opinions of well-respected professionals in the field, then it can be impactful to quote these findings.

Be careful; the findings may not represent the majority of professionals in that social science field. Additionally, the findings may be based on weak data or have many caveats. Make sure you fully understand the information being presented before quoting the findings and include in your presentation any necessary clarifying information.

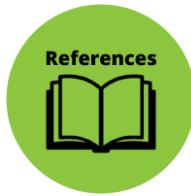
Editorializing

Editorializing is a newspaper term, meaning to insert personal opinion or bias rather than to simply report the facts. Removing all bias from your own investigation is tricky; you have specifically been asked to explain your own personal interest in the social science issue and draw a personal connection with the audience as well.

However, there is a big difference between identifying personal interest and inserting bias or opinion with regard to the facts. For example, if a social scientist is investigating marriage, he or she cannot claim that marriage is "a stupid social institution that was invented to keep couples unhappy." Nor can he or she state that "marriage is the only way for two people to truly demonstrate their love for one another." These statements are not factual, cannot be proven with evidence, and stray from presenting a well-researched issue objectively.

Instead, the speaker could note factual trends. For example, the Pew Research Center, analyzing data collected by the U.S. Census Bureau, notes that "only about a quarter of young adults were married in 2008. This compared with about two-thirds in 1960" (2010). Then, the speaker may note why this is of interest to him or her. Perhaps he is disinterested in marriage but still feels pressure from his parents and older members of society to get married. He may wonder if his dynamic with his parents is representative of a national trend and work to find information that supports this theory.

When presenting your issue, be sure to keep a close eye on the line between demonstrating personal interest and editorializing.



Pew Research Center. (2010). "The decline of marriage and rise of new families: Executive summary." Retrieved from pewsocialtrends.com.

Narrative: The Mark of a Good Presentation

As listeners and thinkers, we respond well to stories. We grow up hearing them, and storytelling plays an important role in every culture. Storytelling has deep evolutionary roots. We are wired to learn from stories. We fashion meaning from them, and they help lend order to our world.

Narrative can become a powerful presentation tool, bringing abstract concepts to life. Great speakers often employ anecdotes, sayings, and stories to engage and inform their audiences.

When determining how to present your social science issue, it can be helpful to identify the narrative that your ideas will follow. In the context of your presentation, the narrative is the story, path, or journey that you take to explain your social science issue from beginning to end.

A narrative can be a literal story that you tell. Stories involve characters that encounter obstacles or difficulties and feature some sort of resolution. For example, in the last theme, we illustrated the research process by telling the story of Mark. Mark was introduced as a social scientist confronted with

his daughter's somewhat troubling interactions with social media. This became the obstacle Mark confronted, and his research into the relationship between social media platforms and well-being indicated a path toward some type of resolution. Mark's narrative helped provide a framework for the tasks that you would be doing, while also explaining the logic behind each step that he took.

In the TED Talk given by Pardis Sabeti in the last learning block, you learned about her research within a narrative as well. First she introduced Kenema, Sierra Leone and Arua, Nigeria, the people working there, and the rituals and practices they perform. Then she related the importance of her work while also telling about the events of the Ebola outbreak in 2014. She finished her presentation by looking to the future. In the closing, she asks the audience to think about the next great viral outbreak and asserts that the scientific community will need to be united to battle it.

However, not all narratives are literal stories with characters and a narrative arc. Narrative does not have to be chronological. It can also be logical. You can create narrative by describing the connection between one topic and another, all the while relating it back to the big picture.

What is most important is that the narrative of your presentation organizes the information you introduce in a coherent and compelling way. Narrative is useful because it provides an overarching context for your research and helps to show the relationship between each piece of information that you choose to present.

Structuring the Narrative

You have the rough elements of your presentation, but there are several different ways that you can combine these elements to create an engaging narrative. In this section, we discuss some considerations for structuring your narrative.

The Hook

A hook occurs at the beginning of the presentation. This is something that grabs the audience's attention and makes them want to keep listening. Some effective hooks include:

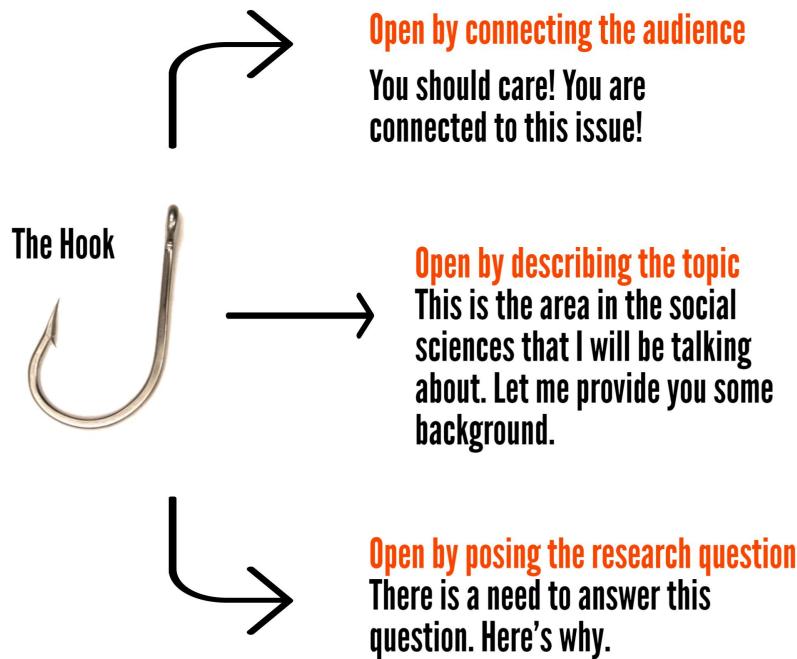
- telling an emotionally moving story
- citing a surprising statistic or fact
- asking the audience their opinion on a controversial issue while introducing your own
- using humor
- introducing a thoughtful quote

You may be able to find your own hook by thinking about why you were drawn to your research question. You may have found a particularly surprising piece of information during the research process that could serve this purpose. This is a great opportunity to be creative! Simply ensure that your hook is on topic, relevant, and not *too* shocking. (Don't use foul language or disturbing images.)

The Body

What comes after the hook? As you have seen from some of the TED Talks that you've watched, there is no single, correct way to walk the audience through a social science issue. The flow of the presentation depends on many factors, including the logical links between each chunk of information, the point that the speaker is trying to make, and the most effective way to use the research.

Here are some potential jumping off points you might use after the hook:



Let's discuss some of the logical paths associated with these jumping off points.

Open by connecting the audience. When you open by drawing an immediate connection between the audience and your issue, you provide a contextual framework for the rest of your discussion. Each step of the way, you have the ability to draw on that connection, to expand upon that connection, and to strengthen that connection as you describe the social science issue and your research investigation.

Open by describing the field. When you open by describing the area of the social sciences that you have explored, you have the opportunity to paint your audience a picture in preparation for more difficult concepts. This is a good strategy if your audience will require a lot of background information before understanding exactly how they are impacted by your research question.

Open by posing the research question: Opening with a research question is a great jumping off point for making the case as to why it needs to be answered. *I don't know the answer, but we need to find out! Here's why.*

Again, these are not the *only* narrative paths you could take; these are just a few suggestions!

The Closing

Your presentation needs a cohesive closing. Often, closings will reference the beginning; for example, you might ask the audience to remember your hook, answer a question that you posed in the beginning, or show the opening graphic again.

However you do it, the closing should wrap things up by stepping back to look at the larger context of your issue in order to drive home the point: the audience should care. All of your points and the evidence you've offered to support those points drive at that takeaway, and your closing needs to make that clear.

Tips for Creating a Narrative

- Reflect on your own process in this research project. How did you arrive at the research issue and research question you have selected? You may be able to pull from your own experience to craft a story.
- Explain your research project to someone new. Discussing your work out loud with someone who is unfamiliar with it might highlight places where it is not clear how you intend to connect one topic to another or how you are reaching certain conclusions based on the information you've presented so far.
- Draw on an existing narrative. Is there a well-known story — one that can be told *quickly* — that parallels your research investigation? If so, use that narrative to frame the discussion. This will not only provide you the hook and the overarching framework for your presentation, but it helps you draw the connections between ideas. Be careful! Forcing your topic into a story that doesn't parallel it well can be confusing for your audience.
 - By "quickly," we mean, "under 30 seconds." For example, everyone knows the story of "The Boy Who Cried Wolf." If you don't know it, it's the story of a boy who frequently tricked his fellow villagers into believing he'd seen a wolf. On the day that he *did* see a wolf, no one believed him. This whole story can be used to frame a larger discussion about a social science issue without wasting a significant amount of time telling it.

Why Use Visuals?

You may have crafted an engaging presentation narrative with an interesting hook. Your poise, tone, and delivery may be spot on. Your message may be tailored to the audience. While your spoken elements might be tuned to perfection, complementing your presentation with visual images is an effective, powerful way to drive home your message.

The phrase "a picture is worth a thousand words" gets at the exact reason visuals are a key element to your presentation. In some cases, it is faster and easier to simply show the audience what you mean. This can include showing them an exemplary piece of architecture, the impact of war on residential homes, or the faces of people who are brought joy by art.

Graphical representation of information, such as colorful, clearly presented statistics and figures, can help your audience comprehend the meaning behind the numbers.

Finally, slides can "do the talking" while you're filling in details. A simple slide that displays the main point can put your words in context. If the audience walks away with nothing else, they may walk away with the image of your slide, displaying a single word that represents your message.

For all of these reasons, it is not only important to *have* visuals, but it is important to have *well designed* visuals. In this learning block, we'll review tips and standards for creating interesting, professional visuals to engage your audience and underscore your message.

Tips for Creating Slides

Read these guidelines for creating effective slides.

DO:

- Choose a simple but attractive color scheme that ties your presentation together.
- Use visuals to emphasize keywords, main ideas, takeaways, and concepts throughout the presentation.
- Use visuals to illustrate main ideas and concepts by displaying graphical data or powerful images.
- Add variety to your visuals. Showing seven graphs in a row can overwhelm the audience. Mix it up by including images, quotes, short video clips, and charts.

DON'T:

- Use fonts that are difficult to read.
- Write everything you say on the slides. These materials should complement and support your presentation — your slides should not serve as a substitute to what you'll be saying while they are displayed.
- Create a visual for every single sentence. Instead, use visuals to highlight main ideas.
- Add unnecessary special effects or transitions that may distract the audience.
- Include "extra" information that is related to your issue but is not discussed during the presentation — your visuals should address only the information that you will discuss during the presentation.
- Overdesign your slides. Keep the layout simple and avoid adding too many busy patterns, icons, or images.
- Use busy or colorful backgrounds or wallpapers that will make your main graphics difficult to read.

Citing Slides

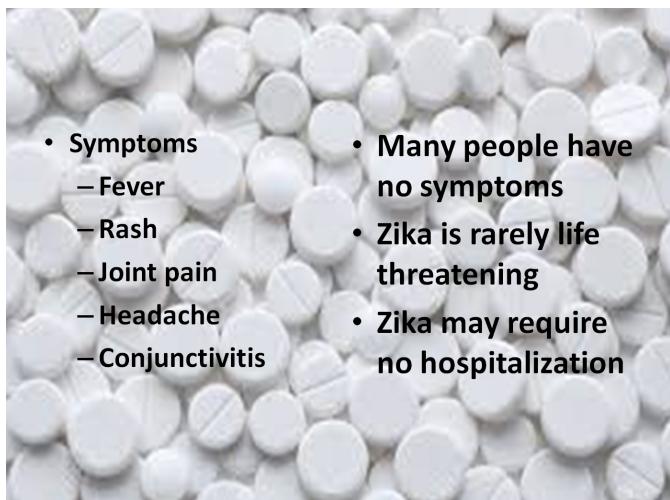
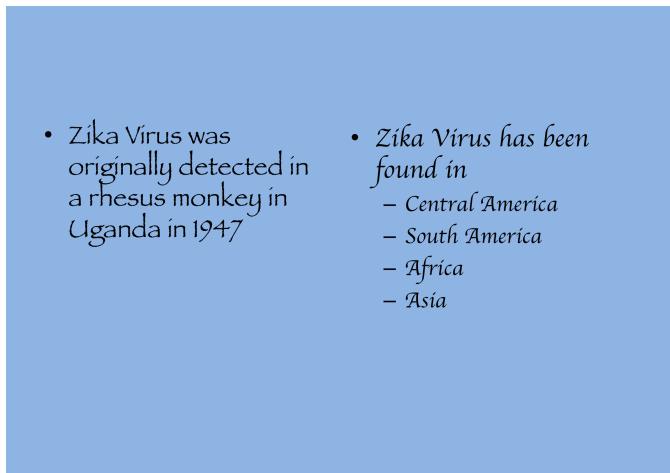
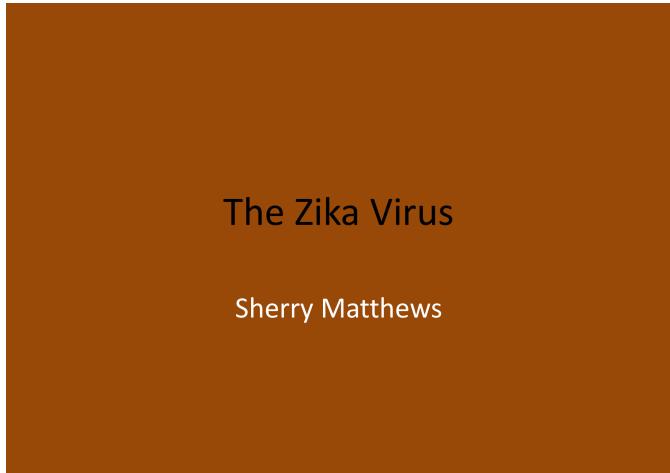
Just like in your Project One: Research Investigation, you need to include citations for your sources in Project Two: Presentation. This should be a fairly easy task, because you can use the same sources and citations that you did for Project One. To cite your slides correctly, simply include the following information:

1. A title page that includes the title of your presentation, your name, and your school's name.
2. In-text citations next to the information that you are citing on each slide.
3. A slide with your references at the end. You take these straight from your Project One references list. Remember to only include the references that you cite in the slides; don't simply copy and paste *all* of them. Additionally, if you include any new sources, be sure to cite those in APA format as well. Return to the SNHU Shapiro Library APA Style Guide to review how to format references in APA. This link will open in a new tab.

On the next page, you will see a presentation that is formatted correctly in APA.

Comparing Effective and Ineffective Visual Aids

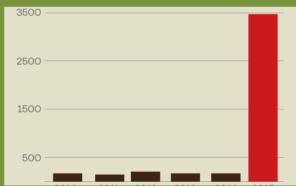
The following are demonstrations of how someone might present information on the epidemiology of the increasingly prevalent Zika virus. The first video demonstrates a relatively weak presentation style, whereas the second video is an example of a presentation that is complementary of the material being conveyed and is more likely to engage the audience.



Microcephaly

- Link suspected between contraction of the virus during pregnancy and microcephaly, a dangerous fetal developmental disorder.
- Children born with microcephaly have smaller than average heads. The condition can cause seizures, convulsions, developmental and intellectual delays and disabilities, poor speech and motor function, and facial abnormalities.
- Microcephaly can also be caused by malnutrition.

Zika and Microcephaly in Brazil



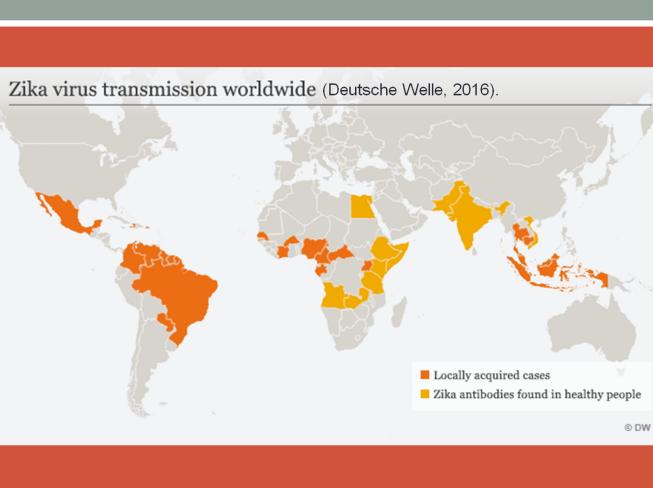
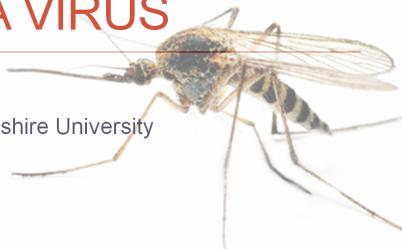
As of now there is no cure for either microcephaly or the Zika virus, and the virus has no vaccine. Which is why the Center for Disease Control and World Health Organization have issued travel notices advising women who are or may soon become pregnant from traveling to countries where the virus has been detected.

This presentation includes a number of visual features and elements that could be perceived as distracting or visually unappealing. For example, the font and color scheme switch between each slide. This can make the slides look disorganized and cause viewers to question why visual elements may have changed. The fonts in slide two do not match and could potentially be difficult for some viewers to read. Keep in mind that simple, consistent fonts are best when preparing professional or academic presentations! Be cautious when text appears layered over an image (as in slide 3), as audience members may struggle to read the text. You can avoid this by ensuring the image is transparent enough so as not to detract from the text, or limiting any text/image overlays entirely. The transitions between each slide could also be considered distracting and overly complicated. As with font choices, simple, consistent transitions are best and can help ensure your audience remains focused on the valuable content you're presenting.

Many of the slides in this example are quite text heavy, and, with text-heavy slides, there's always the chance that the audience will read the slides rather than listen to what's being said in your presentation. Keep in mind that your slides are visual aids and that these visual aids should complement a presentation, not dominate the audience's attention. Last, in this example, the student has included one chart (slide 5) conveying information about microcephaly rates in Brazil, but she has cropped important information out of the image, including details citing the source of the chart as well as elements necessary to understand what is being represented. This could potentially add to the audience's confusion around the topic, rather than improve their understanding, as the presenter had hoped.

THE ZIKA VIRUS

Sherry Matthews
Southern New Hampshire University



Symptoms, (CDC, 2016).

Fever

Rash

Joint Pain

Headache

Conjunctivitis

Zika Virus has been linked to microcephaly (NIH, 2016).

- Smaller than average heads
- Seizures
- Cognitive disabilities
- Facial abnormalities
- Delayed motor functions



Figure 1. Head size (Smith, 2014).



Figure 2. Cases of Microcephaly in Brazil (Vox, 2016).

CDC has issued a travel alert (**Level 2- Practice Enhanced Precautions**) for people traveling to regions and certain countries where Zika virus transmission is ongoing, (CDC, 2016).

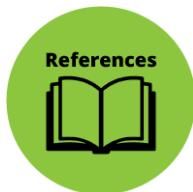
Background image: Zika (CDC, 2016).

References

- Deutsche Welle. (2016). WHO expects Zika virus to spread through Americas, except Canada and Chile. Retrieved January 2016 from dw.com.
- Centers for Disease Control and Prevention (CDC). (2016). Symptoms, Diagnosis, & Treatment. Retrieved July 2016 from cdc.gov.
- Centers for Disease Control and Prevention Public Health Image Library. (2016). Zika. [Public Domain image]. Retrieved July 2016 from cdc.gov.
- National Institute of Neurological Disorders and Stroke (NINDS). (2016). NINDS Microcephaly Information Page. Retrieved from ninds.nih.gov.
- Smith, C. (2014). Microcephaly Then and Now. *Prezi*. Retrieved July 2016 from prezi.com.
- Belluz, J., Zarracina, J. Moore, M. (Eds.). (2016). Zika virus, explained in 6 charts and maps. *Vox*. Retrieved July 2016 from vox.com.

The presenter has selected a simple but attractive color scheme and font that remains consistent through the presentation. This first step makes the entire presentation appear more polished and professional. The fonts are all legible and an appropriate size. Changes in the appearance of font are used with discretion and for emphasis when appropriate.

Furthermore, this researcher has limited the amount of content presented on each slide. The audience is less likely to get lost reading the content on the screen and therefore more likely to stay tuned in to what the presenter is saying. In order to cut down on how many words appear in the slideshow, the researcher has presented information graphically whenever possible. For example, information about the spread of the virus was presented via a graphic of a map, and not in a series of bullet points like in the previous presentation. However, the student didn't have to spend a lot of time creating this map — or any of the other graphics in the presentation — from scratch. Instead, she found maps and charts that were already available online and used those in her presentation with appropriate citations.



Deutsche Welle. (2016). WHO expects Zika virus to spread through Americas, except Canada and Chile. Retrieved July 2016 from dw.com.

Centers for Disease Control and Prevention (CDC). (2016). Symptoms, Diagnosis, & Treatment. Retrieved July 2016 from cdc.gov

National Institute of Neurological Disorders and Stroke (NINDS). (2016). NINDS Microcephaly Information Page. Retrieved from ninds.nih.gov

Smith, C. (2014). Microcephaly Then and Now. *Prezi*. Retrieved from prezi.com

Belluz, J., Zarracina, J. Moore, M. (Eds.). (2016). Zika virus, explained in 6 charts and maps. *Vox*. Retrieved July 2016 from vox.com.