

SYNCHRONOUS ONLINE LESSON

LESSON PLAN AND SLIDES



July 15, 2020

Karen E. Ballengee

July 15, 2020

7:00 p.m. Central Time

Audience: Adult Learners

Content Area: Accessibility

Attendees: Wendy Dover and Susan Dawson

Outcome(s):

When given a Word document containing accessibility errors, students will perform an accessibility check and make the document 100% accessible.

- The students will successfully add alt text to an image.
- The students will successfully use compliant color contrast.

Outline of Activities

The students were first given the link to a [Wakelet](#) and a Word document to bring to class. The Wakelet contains all of the materials needed for the lesson, slides from the presentation, how-to videos, surveys, extra resources, and materials for future lessons and the final project. The students need only to answer the pre-course survey linked in the Wakelet and watch a short video on accessibility. They were encouraged to download the PDF guide and follow along and watch the how-to videos for the current lesson. The reason we did not watch the video over Zoom is sometimes there is a lag between audio and video.

I presented the lesson using Power Point because I believe this is the best way to present visual information. First, I started by introducing myself and having my students introduce themselves. My goal was to see what they know about accessibility and what they think they need to know. I then moved on to explain how to ask a question, what to do if we encounter a ZOOM bomber, and how to find the chat. These students seemed familiar with ZOOM I didn't have to do much explaining.

The lesson started with the different types of disabilities and other conditions that can benefit from accessibility. Then the students learned how to use proper color contrast and add alt text to an image. I used examples for both so that the students had a clear idea of each. Embedded in the Power Point were several check-for-understanding activities

I then demonstrated to the students how to run an accessibility check, add alt text and how to find the proper color contrast. After that, I had the students demonstrate their knowledge. I gave them the choice of having a break and doing it on their own or walking me through it. They choose to walk me through it. If this lesson continued, the students would continue, the students would create their own fully-accessible invitation or event advertisement in Word. We even had a little time so that I could show them [Adobe Color](#) and [WebAIM Color Contrast Checker](#) to get the hex values for their text and check it for accessibility. This would be something that would be in the next lesson.

Student learning and engagement was assessed informally through questions about the video, the check-on-learning where they classify something as a disability or a condition that can benefit from accessibility, their identification of proper color contrast, and their ability to walk me through the steps of running an accessibility check

ZOOM Features Used:

- Chat Box
- Annotation
- Screen Share

Reflection

Overall Success of the Lesson

Since the students met the objectives, the lesson was successful. The students were engaged and asking thoughtful questions. They even looked at the additional Wakelet material before the class. I had one student tell me she is going to use the how-to PDF at work.

Challenges and Changes

I've presented this material several times at conferences and I was worried about how to make it engaging through a ZOOM session. The students in this case, were very eager to learn and have at least intermediate knowledge of Word. I gave them a word document so they would have a hands-on activity. This would probably work best if I gave them five minutes to complete the task. In the future, I may have to have the students share their screen if they aren't getting it.

I completely forgot about MAC users so that question wasn't included in my survey and I have no instructions for MAC. I will definitely ask the MAC question in the next survey. I'm not sure how I will get screen captures since I do not own a MAC. The best plan would be to include YouTube videos on how to do each task on a MAC.

This class had no time limit, but any future training may. We got slightly off track during this session, but I felt like the students were asking great questions and I want to encourage that. Maybe I can just have students type any questions into the chat and stop only at certain points to answer the questions.

Evaluation of ZOOM features

Chat box

This worked very well. I was able to place the links to the surveys and Wakelet in here and the students were able to retrieve them. The chat is automatically saved so I have a record of what the students said they learned in this session.

Annotation

This worked perfect for circling the color that doesn't have good contrast, writing a check beside the colors that do have good contrast, and placing a question mark beside the color that is questionable. I was also able to erase these annotations.

Screen Share

Screen Share worked very well for presenting my Power Point and demonstrating what I want the students to do in Word. Screen Share has one little quirk that I discovered during this session. If I go from sharing a PowerPoint to a Word document or website,

the students' screen may lag behind. They are still seeing the PPT when I have moved on to the Word document. The best way to deal with this issue is to stop sharing and then start sharing again.

Tips and strategies

Have your documents and websites ready for screen share. This way you are not wasting class time by searching for what you want to show students.

If the class is really large, remind everyone to mute themselves until it is their turn to speak or have them raise their hand so that more than one person at a time isn't speaking. I have found that, in smaller groups, it's ok if everyone is off of mute.

Practice. I practiced this lesson using ZOOM four times before I presented it.

Summary of Student Feedback

Chatbox

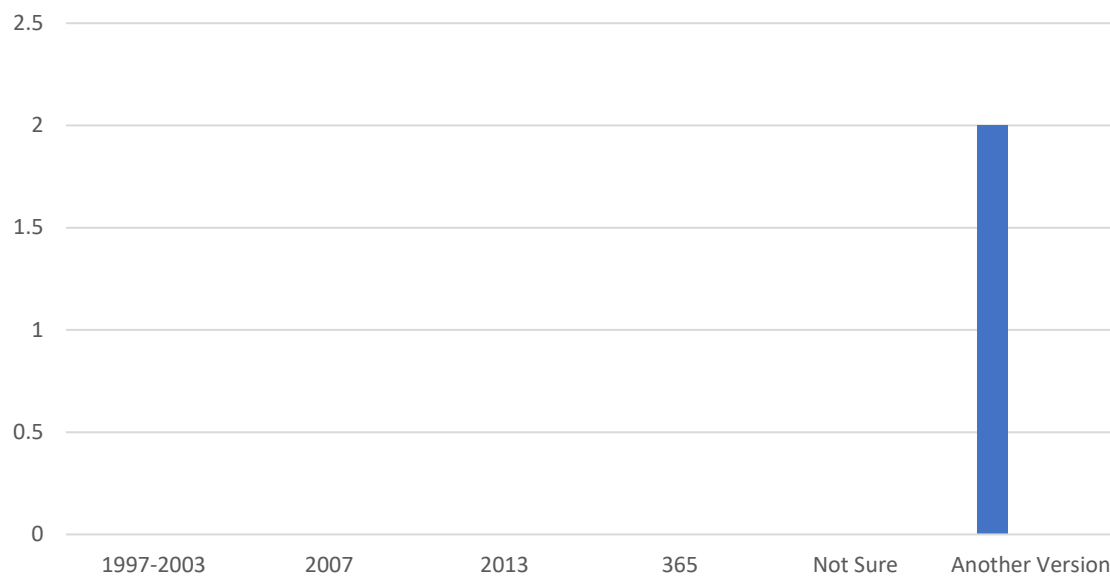
20:59:43	From Wendy the Librarian : I learned that I can go to File>Check accessibility on a Word doc and it checks to make sure I have an ALT tag for images
21:00:11	From Susan Dawson : I learned how color contrasts "accessibility are as important as text and picture accessibility
21:00:49	From Wendy the Librarian : YEs
21:01:15	From Susan Dawson : Yes
21:02:03	From Susan Dawson : This was great Karen! Lots of very helpful information. Thanks!

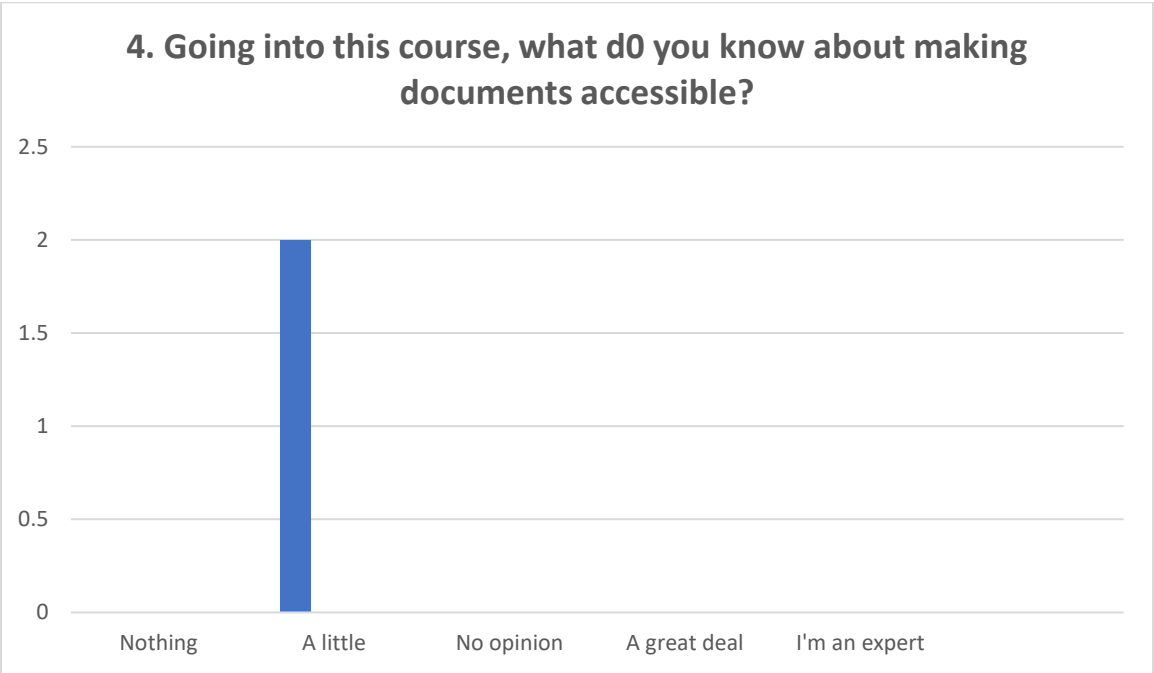
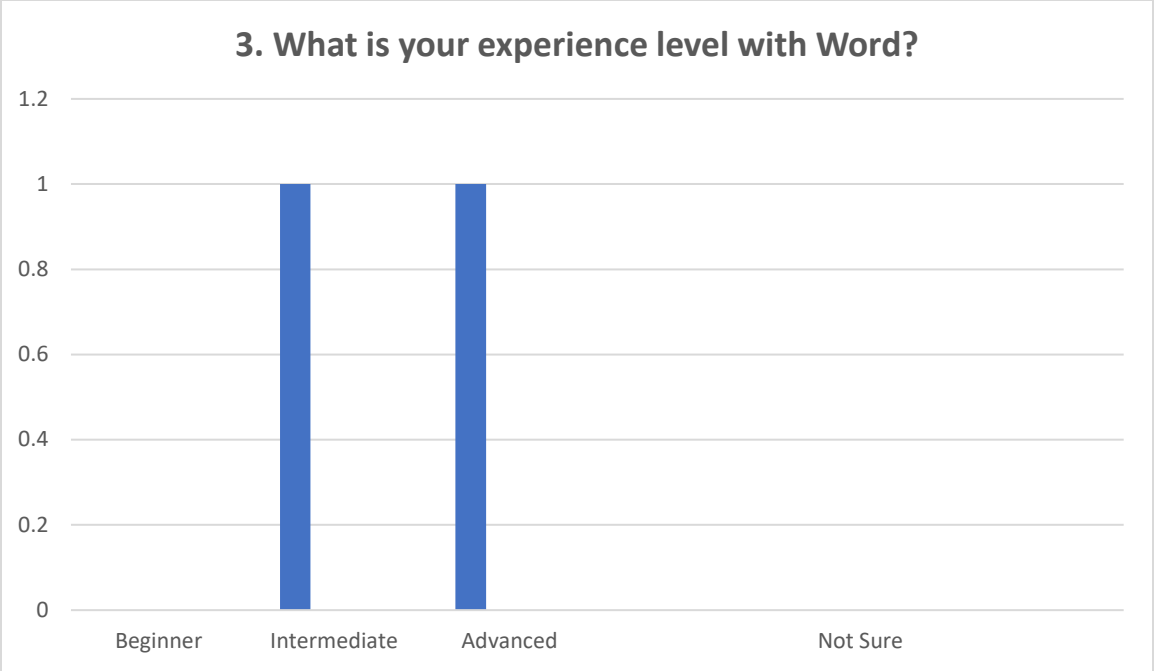
Pre-Course Survey

1. Do you have access to Microsoft Word?

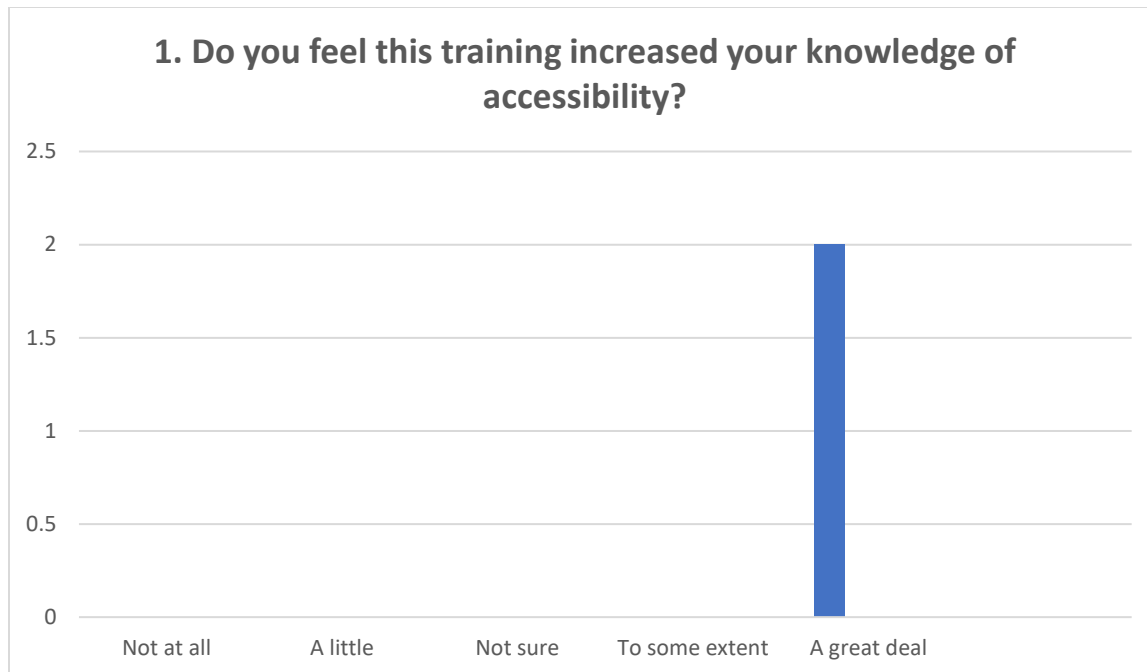


2. Which version of Word do you have?





Post Course Survey



2. What is one thing you learned in this training?

Response 1: How to check a Word doc for accessibility.

Response 2: Accessibility (and accessible documents) is more than just proper text headings and formats, but also concerns color usage/contrasts, formatting changes and issues in applications used, and a multitude of other issues. I especially liked the video that taught us what a screen reader "reads aloud" when using an accessible document versus a non-accessible document! Quite eye-opening!

MAKING YOUR WORD DOCUMENT ACCESSIBLE

KAREN E. BALLENGEE

UNIVERSITY OF MISSOURI



HOUSEKEEPING

- Raise your hand or type in the chat box if you have a question.
- If we have a Zoom bomber, we will shut down the session and I will email you a link to a new session.
- To find the chat, hover over the bottom of the screen and the chat icon (along with others) will appear.

HIT RECORD!!!

LEARNER ANALYSIS

Teacher Introduction

Class Introduction

What is your experience with Word?

What do you already know about accessibility?

OBJECTIVE

When given a Word document containing accessibility errors, students will perform an accessibility check and make the document 100% accessible.

- The students will successfully add alt text to an image.
- The students will successfully use compliant color contrast.

SEQUENCE OF EVENTS

SECTION 1

- Why is accessibility important?
- What are the types of disabilities that can benefit from Accessibility?
- History of Section 508 of the Rehabilitation Act

SECTION 2

- Documents (Microsoft Word)

SECTION 3

- Looking Ahead



SECTION I- ACCESSIBILITY



WHY IS ACCESSIBILITY IMPORTANT?

“
The power of the Web is in its universality. Access by everyone regardless of disability is an essential aspect.

---Tim Berners-Lee

About 56.7 million people — 19 percent of the population — had a disability in 2010, according to a broad definition of disability, with more than half of them reporting the disability was severe.

(U.S. Census Bureau, 2012)

TYPES OF DISABILITIES

Types of Disabilities

- Auditory
- Cognitive
- Neurological
- Physical
- Speech
- Visual

Can still benefit from accessibility

- Mobile phones or small screens
- Temporary disability (lost glasses, broken arm)
- Situational limitations (bright sunlight)
- Slow internet connection
- Low literacy learners
- English language learners

(World Wide Web Consortium, 2018)

HISTORY OF SECTION 508 OF THE REHABILITATION ACT

1973

Vocational Rehabilitation Act

- To correct the problems of discrimination against people with disabilities
- Affirmative action to hire people with disabilities

1986

Section 508

- For electronic documents and information technology
- Was ineffective because of the lack of enforcement

2017

Section 508

- Updated Accessibility Requirement

1973

Rehabilitation Act

- Expanded training programs for those with disabilities

1998

Section 508

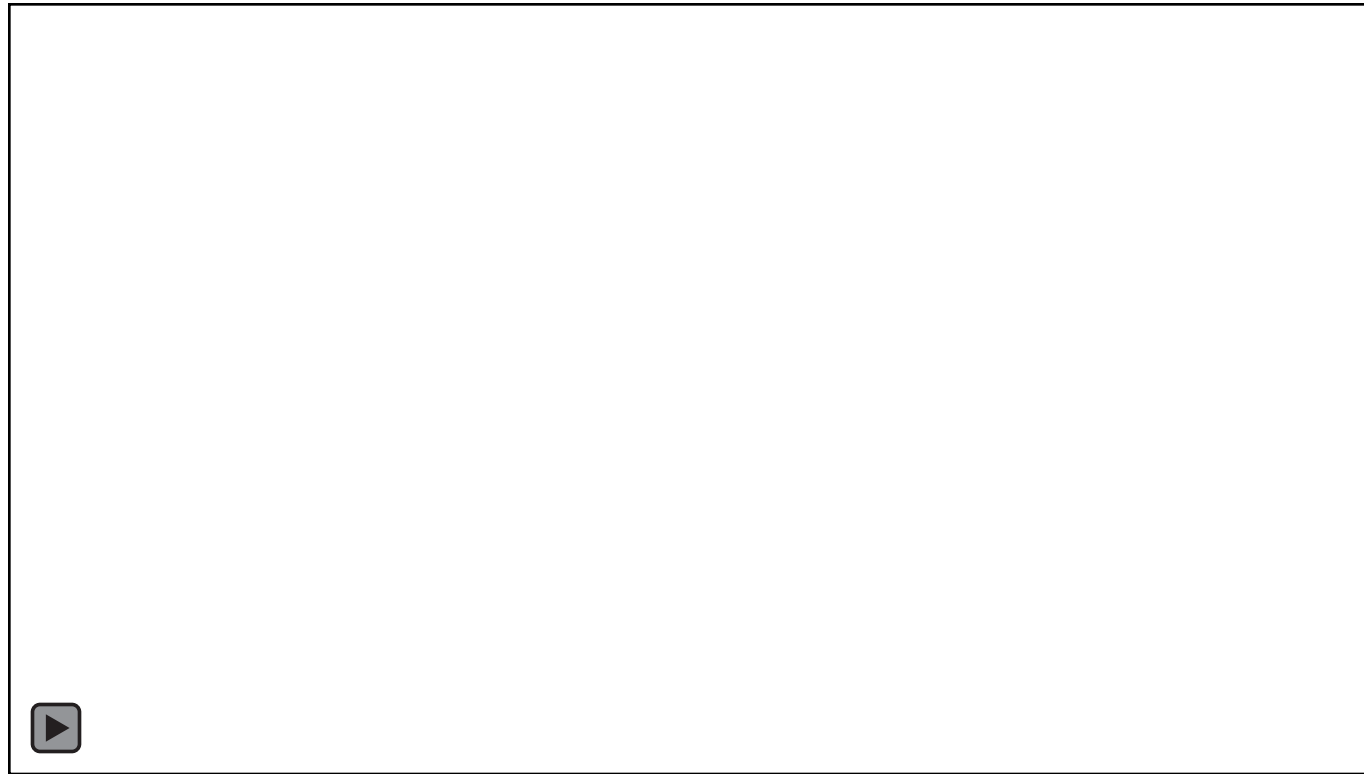
- All Federal agencies must comply
- Private agencies do not unless they receive federal funds

January 18, 2018

Section 508

- New guidelines went into effect

VIDEO OF SCREEN READER BEING USED



Questions:

- Did you know anything about web accessibility before viewing this video?
- What did you learn by watching this video?

CHECK ON LEARNING

Categorize the item as a disability or as something that isn't a disability, but can still benefit from accessibility.

Item	Disability	Can benefit from accessibility
Small screen		
Physical		
Auditory		
Cognitive		
English Language Learners		
Situational limitation		
Slow internet connection		
Neurological		
Temporary disability		
Speech		
Visual		
Low Literacy Levels		



MICROSOFT WORD



COLOR CONTRAST

AAA

7:1 Normal text

4.5:1 Large text

(large text is 14 pt and bold or larger or 18 pt and larger)

Must be done manually in Word.

HOW DO I CHECK FOR CONTRAST?

COLOR

COLOR

COLOR

COLOR

CONTRAST CHECK I

CONTRAST CHECK I

Foreground Color

#FFFF00 

Lightness



Background Color

#FF0000 

Lightness



Contrast Ratio

3.72:1

[permalink](#)

Normal Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

CONTRAST CHECK 2

CONTRAST CHECK 2

Foreground Color
#ADDBBD
Lightness


Background Color
#BSEAF6
Lightness


Contrast Ratio
1.03:1
[permalink](#)

Normal Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

CONTRAST CHECK 3

CONTRAST CHECK 3

Foreground Color

Lightness


Background Color

Lightness


Contrast Ratio
9.75:1
[permalink](#)

Normal Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Pass**

WCAG AAA: **Pass**

The five boxing wizards jump quickly.

CONTRAST CHECK 4

CONTRAST CHECK 6

Foreground Color

#234857 

Lightness 

Background Color

#0D1930 

Lightness 

Contrast Ratio

1.78:1

[permalink](#)

Normal Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

Large Text

WCAG AA: **Fail**

WCAG AAA: **Fail**

The five boxing wizards jump quickly.

ALT TEXT

- Describes the appearance and function of an image
- Helps visually impaired users understand the image
- Displayed in place of the image if the image cannot be accessed

TYPES OF IMAGES

- Decorative
- Informative

DECORATIVE



Pomeranians

The **Pomeranian** (often known as a **Pom**) is a [breed](#) of [dog](#) of the [Spitz](#) type that is named for the [Pomerania](#) region in Germany and Poland in [Central Europe](#). Classed as a [toy dog](#) breed because of its small size, the Pomeranian is descended from the larger Spitz-type dogs, specifically the [German Spitz](#). It has been determined by the [Fédération Cynologique Internationale](#) to be part of the German Spitz breed; and in many countries, they are known as the [Zwergspitz](#) ("Dwarf-Spitz").

The breed has been made popular by a number of royal owners since the 18th century. [Queen Victoria](#) owned a particularly small Pomeranian and consequently the smaller variety became universally popular. During Queen Victoria's lifetime alone, the size of the breed decreased by half. Overall, the Pomeranian is a sturdy, healthy dog. The most common health issues are [luxating patella](#) and [tracheal collapse](#). More rarely, the breed can suffer from Alopecia X, a skin condition colloquially known as "black skin disease". This is a genetic disease which causes the dog's skin to turn black and lose all or most of its hair.^[1] As of 2013, in terms of registration figures, since at least 1998, the breed has ranked among the top twenty most popular breeds in the USA, and the current fashion for small dogs has increased their

No alt text needed

INFORMATIVE

Pomeranians

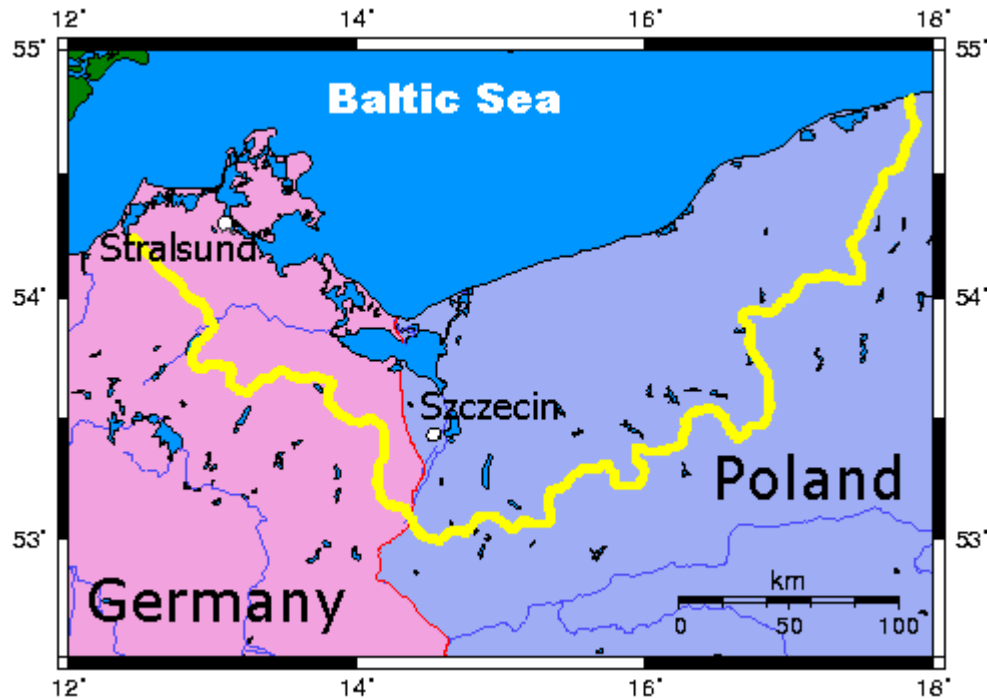


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Cream-colored Pomeranian

INFORMATIVE-EXAMPLE 2



A map showing the area on the Baltic Sea between Germany and Poland. This area is called Pomerania and is where the Pomeranian originated.

INFORMATIVE EXAMPLE 3



Go to Next Page

INFORMATIVE OR DECORATIVE I



ALL ABOUT VIRGINIA

DECORATIVE

INFORMATIVE OR DECORATIVE 3



Virginia's Tourism Slogan

"Virginia is for Lovers" is the tourism and travel slogan of the U.S. commonwealth of [Virginia](#). Used since 1969,^[1] it has become a well-recognized and often imitated part of American jargon. In 2012, [Advertising Age](#) called "Virginia is for Lovers" "one of the most iconic [ad campaigns](#) in the past 50 years."^[2]

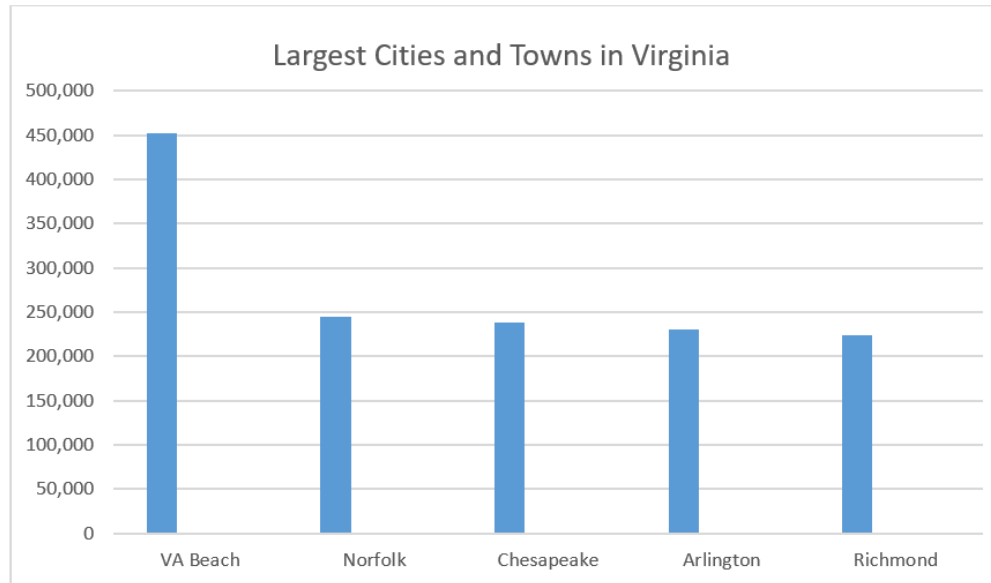
INFORMATIVE/
DECORATIVE

INFORMATIVE OR DECORATIVE 4



INFORMATIVE

INFORMATIVE OR DECORATIVE 5



INFORMATIVE

CONCLUSION

Type in the chat box.

- What did you learn about accessibility?
- What would you still like to know about accessibility?

Please take the post-course survey.