Considerations for Security Awareness & Inclusive Design

Tara Schaufler, Princeton University & Ben Woelk, Rochester Institute of Technology
May 2019
Agenda

- Intro
- Awareness
- Importance
- Design Principles
- Inclusive Design
- Learn more...

#Security19
About us

Tara Schaufler
Awareness & Training Program Manager
at Princeton University

Ben Woelk
ISO Program Manager
at Rochester Institute of Technology

#Security19
Many overlaps in goals, approaches, and guidelines
Inclusive Design

is designing for everyone!
Disability Awareness

15% in the world live with some form of disability

Disability Awareness

19% in the US have a disability

Source: US Census Bureau 2010
Changing Attitudes

- Legislation
- Societal shift
- Recognizing abilities
- Positive terminology
Importance for us
What does inclusive design mean to you?
Security Awareness & Inclusive Design

What kind of materials are you producing and are there opportunities to make them more inclusive?

- Documents
- Presentations
- Videos
- Websites
- Images, Graphs, Tables
- Events
Five Principles of Visual Design

Balance
Alignment
Grouping
Consistency
Contrast
# Balance

For us Graphic Design is Information. There are other types of graphic illustration or a narrative nature.

Nothing could be more useful to teach than the Grid. The grid represents the basic structure of any design; it helps to organize the content, gives structure and a visual consistency to the project. It projects a level of intellectual elegance that we like to express. There are infinite kinds of grids, but just one—the most appropriate—for any problem. Therefore, it becomes important to know which kind of grid is the most appropriate. The best understanding is that grids are an instrument to help us organize information.

<table>
<thead>
<tr>
<th>Grids, Margins, Columns and Modules</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization of Information. There are other types of graphic illustration or a narrative nature.</td>
</tr>
<tr>
<td>Nothing could be more useful to teach than the Grid. The grid represents the basic structure of any design; it helps to organize the content, gives structure and a visual consistency to the project. It projects a level of intellectual elegance that we like to express. There are infinite kinds of grids, but just one—the most appropriate—for any problem. Therefore, it becomes important to know which kind of grid is the most appropriate. The best understanding is that grids are an instrument to help us organize information.</td>
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Alignment

OR
## What Do B2B Customers Want To Know?

<table>
<thead>
<tr>
<th>If your customer is asking:</th>
<th>What’s my problem?</th>
<th>How do I fix my problem?</th>
<th>Are you right for me?</th>
</tr>
</thead>
<tbody>
<tr>
<td>They want: Education &amp; Thought Leadership</td>
<td>Solutions &amp; Product Suitability</td>
<td>Credentials &amp; Decision Support</td>
<td></td>
</tr>
<tr>
<td>What to share with them:</td>
<td>• Trends</td>
<td>• What is the solution &amp; how does it work?</td>
<td>• Pricing</td>
</tr>
<tr>
<td></td>
<td>• Benchmarks</td>
<td>• Solution comparisons</td>
<td>• Bench strength demonstration</td>
</tr>
<tr>
<td></td>
<td>• Analyst coverage</td>
<td>• Pitfall analysis</td>
<td>• Case studies</td>
</tr>
<tr>
<td></td>
<td>• 101 Education</td>
<td>• Readiness &amp; suitability assessments</td>
<td>• ROI/TCO</td>
</tr>
<tr>
<td></td>
<td>• How to guides</td>
<td>• How do I choose a vendor?</td>
<td>• How to buy</td>
</tr>
<tr>
<td></td>
<td>• How other people are solving this?</td>
<td></td>
<td>• Working with us</td>
</tr>
</tbody>
</table>

Consistency
Contrast
Inclusive Design
Accessibility for Documents

Add alternate text for images
Use headings
Use tables wisely
Use meaningful hyperlinks & lists

Other tips:
• Identify document language
• Use the accessibility checker

Information Security Office

ISO Position Paper

<table>
<thead>
<tr>
<th>Position Title</th>
<th>Multifactor Authentication Requirement for Office 365</th>
</tr>
</thead>
<tbody>
<tr>
<td>Position Audience</td>
<td>Princeton IT Professionals</td>
</tr>
<tr>
<td>Contact</td>
<td>Information Security Office: <a href="mailto:InfoSec@princeton.edu">InfoSec@princeton.edu</a></td>
</tr>
<tr>
<td>Position Release Date</td>
<td>November 2018</td>
</tr>
<tr>
<td>Last Update</td>
<td>Initial posting</td>
</tr>
</tbody>
</table>

Problem Statement

Spammers continue to compromise credentials in order to leverage the University’s email infrastructure to send large volumes of spam email. Measures were put into place on campus to minimize this capability once an account is compromised. The migration of University email services to Office 365 Exchange Online provides a new environment for spammers to attempt to leverage for their use.

ISO Position

In order to minimize the capability of spammers to leverage compromised credentials in Office 365 Exchange Online, all access to email services must be multifactor protected.

Additional Information

• Duo multifactor knowledge base article
• Office 365 knowledge base article
Accessibility for Presentations

- Use built-in Microsoft slide templates
- Set reading order of slide contents
- Clearly describe hyperlinks
- Add alt-text to visuals and tables
- Color contrast
- Place all text in outline view
- Captioning on videos & transcript on audio
- Use an accessibility checker
Accessibility for Videos

Make your videos accessible with captioning:

Princeton’s ISO Facebook Live 2018
Accessibility for Websites

Get familiar with the Web Content Accessibility Guidelines (WCAG)

• Guidelines to make web content more accessible to people with disabilities
Accessibility for Websites

Add alternative text

Describe links

Use headings to create structure
Accessibility for Websites

Use good color contrast & don’t rely on color alone

Other tips:
● Clear navigation
● Identify languages
● Define tables

Safe Computing

Scanning Tools for Computers and Mobile Devices

Keep University Data Safe

If you have Personally Identifiable Information (PII) data on any of your institutional devices, please remove it promptly.

As outlined in Princeton’s Information Security Policy[1], the University requires that the following pieces of PII (classified as Restricted) may not be collected, stored or used except in situations where there is legitimate business need and no reasonable alternative:

- Social security number
- Bank account number
- Driver’s license number
- State identity card number
- Credit card number
- Protected health information (as defined by HIPAA)

Use lists
Websites

Screen reader example:

• Inaccessible web form
• Accessible web form

Examples courtesy of: SimplyAccessible.com
Accessibility for:

Images
- Add alt-text

Tables
- Add structural markup
- Add row and column headings
- Add alt-text

MONTHLY BUDGET

<table>
<thead>
<tr>
<th>Month</th>
<th>Earned</th>
<th>Spent</th>
<th>Saved</th>
</tr>
</thead>
<tbody>
<tr>
<td>January</td>
<td>$2500</td>
<td>$2000</td>
<td>$500</td>
</tr>
<tr>
<td>February</td>
<td>$2800</td>
<td>$2100</td>
<td>$700</td>
</tr>
</tbody>
</table>
Accessibility for Graphs

- Add alt-text
- Don’t rely on color alone
Accessibility for Events

- Does your LMS support accessibility?
- Supply contact information in your event listings to request accommodations.
Other tips

- Avoid flashing or flickering content
- Avoid reliance on sensory characteristic
- Ensure proper tab and read order
- Provide accessible time limits
Call to Action

• Does your institution have an accessibility initiative?
  • If so, learn more!
• When you prepare communications, ask yourself if it meets the standards we discussed today?
• Take advantage of the resources available on the web!

Learn more and become an inclusive designer!
Resources to get you started...

CPACC (Certified Professional of Accessibility Core Competencies):
• [https://www.accessibilityassociation.org/cpacccertification](https://www.accessibilityassociation.org/cpacccertification)

Resources from Princeton’s User Experience Office:
• [https://ux.princeton.edu/accessibility/accessibility-checklist](https://ux.princeton.edu/accessibility/accessibility-checklist)

Web Content Accessibility Guidelines:
• [https://www.w3.org/WAI/standards-guidelines/wcag/](https://www.w3.org/WAI/standards-guidelines/wcag/)
Resources to get you started...

Creating Accessible Documents (Washington.edu):
• https://www.washington.edu/accessibility/documents/overview/

WebAIM Color Contrast Checker:
• https://webaim.org/resources/contrastchecker/

Courses on Inclusive Design on Lynda and Coursera:
• https://www.lynda.com/
• https://www.coursera.org/
Session Evaluations

There are two ways to access the session and presenter evaluations:

1. In the online agenda, click on the “Evaluate Session” link.

2. From the mobile app, click on the session you want from the schedule > then click the associated resources > and the evaluation will pop up in the list.