



Slide 1




**Beyond Aesthetics:
Elevating Accessibility Across Campus**



Dr. Lisa Kidder
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QM Research Online Conference
2/16/2024

ROAR




<https://qr.page/g/2XVFJ1wPiFq>

 **Idaho State University**

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Seventh Edition QM Rubric Committee
Best Friends with SPED teachers
TxDLA Accessibility Specialist Certification





Outline for Today's Session

- Getting to the one practice.
- The one thing.
- QM connections.
- Research connections.
- Invitation to invite others.

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Objectives

- Apply this one practice in your work.
- Invite others to apply this one practice.

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Your Most Painful Accessibility Issue?




Created by Rowan Design
from the Project

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The Problems with PDFs

Tags		Different fonts
No OCR		Difficult to fix
Images		Artifacts
Reading order		

Created by Kivir art from Noun Project

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Best Way to Fix the PDF Issue?

Change the way PDFs are created.
Help people make accessible choices
at the point of creation.

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Slide 8




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Use Styles.

The One Practice

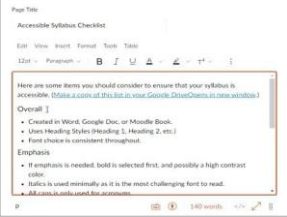
ROAR

The slide content is enclosed in a black rectangular border. The text "Use Styles." is in a large, bold, black sans-serif font. Below it, "The One Practice" is in a smaller, grey sans-serif font. The word "ROAR" is in a white, italicized sans-serif font, positioned on an orange triangular background in the bottom right corner of the slide.

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How to Use Styles...

1. Select the text.
2. Select the appropriate style.



The screenshot shows a web-based accessibility checklist. The main heading is 'Accessible Sillabus Checklist'. Below it is a menu with 'Edit', 'View', 'Insert', 'Format', and 'Tools'. The text area contains the following content:

Here are some items you should consider to ensure that your syllabus is accessible. (State a copy of this list in your course shell content area.)

Overall]

- Created in Word, Google Doc, or Moodle Book.
- Uses Heading Styles (Heading 1, Heading 2, etc.)
- Font choice is consistent throughout.

Emphasis

- If emphasis is needed, bold is selected first, and possibly a high contrast color.
- Italics is used minimally as it is the most challenging font to read.

At the bottom of the screenshot, it shows '140 words' and a small icon.

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How do I Know What is the Appropriate Style?


Use them in order, beginning with Heading 1.

Heading 1 - Top level, only one per page/document

Heading 2 - Subheading

Heading 3 - Next level subheading

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Example of Appropriate Headings

Heading 1 (Roboto Slab, bold, 30)

Heading 2 (Roboto, bold, 24)

Normal (Roboto, Normal, 12)

Heading 2


Normal

Heading 3 (Roboto, Normal, 20)

Normal

Heading 3

Normal





In the LMS


Heading 1 = The name of the page. This is handled by the system.

Heading 2 = The top level within the editor. Remember there will be a page title.

Heading 3 = Next level subheading.

Note: If you need a Heading 4, your page is too long.

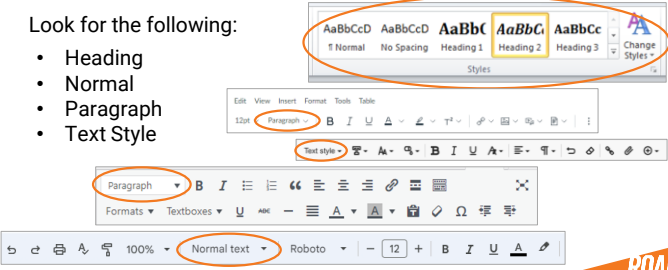
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Where Do I Find Styles?


Look for the following:


- Heading
- Normal
- Paragraph
- Text Style



The screenshot displays the Microsoft Word ribbon with several elements circled in red to indicate where to find styles:

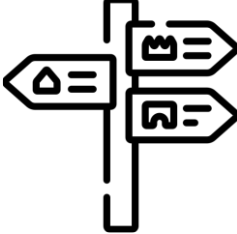
- The **Styles** task pane on the right side of the ribbon, showing a list of styles including Normal, No Spacing, Heading 1, Heading 2, and Heading 3.
- The **Paragraph** menu on the Paragraph group of the ribbon.
- The **Text style** menu on the Text group of the ribbon.
- The **Paragraph** dropdown menu on the Paragraph group of the ribbon.
- The **Normal text** dropdown menu on the Font group of the ribbon.



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Why Use Styles?

- Appearance
 - Consistency
 - Readability
- Efficiency
- Accessibility
- Scaffolding to chunk material
- Clear structure
- Styles transfer




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- **Consistency:** Document styles ensure consistency in formatting throughout a document. When you apply a style to headings, paragraphs, lists, etc., they will have a uniform appearance, which enhances readability and makes the document look more professional.
- **Efficiency:** Styles allow you to format your document quickly and efficiently. Instead of manually adjusting font size, spacing, and other formatting attributes for each section, you can simply apply a predefined style. This saves time and effort, especially for longer documents.
- **Accessibility:** Using styles thoughtfully can improve accessibility for readers with visual impairments or who have other barriers that affect learning. For example, ensuring sufficient contrast between text and background colors, and using clear, readable fonts can make the document more accessible to all readers. It also makes documents compatible with screen readers.
- **Scaffolding:** Document styles help establish a visual hierarchy, making it easier for readers to navigate the content. For instance, you can use different styles for headings of varying levels to indicate their importance and relationship to each other.
- **Clear Structure:** Styles allow you to define different levels of headings (e.g., Heading 1, Heading 2, etc.) and other structural elements such as body text, block quotes, and lists. This creates a clear hierarchy within the document, making it easier for readers to understand the organization and flow of information.
- **Consistency Across Platforms:** Styles often have equivalent counterparts in different document formats. For example, the styles you define in a Microsoft Word document can typically be preserved when exporting or converting the document to formats like PDF, HTML, or rich text format (RTF). This ensures consistency in formatting regardless of the platform or software used to view the document.
 - **Styles Transfer - copy/export from Google the styles stay in Word - export to PDF it is tagged**

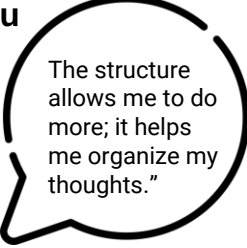


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Helps You



Word is now
working **for** me,
not against me.



The structure
allows me to do
more; it helps
me organize my
thoughts.”

Dr. Clayn Lambert, English Faculty,
Doctoral Colleague



Specific Mentions in the QM Rubric

8.2 - Heading & body styles are consistent

8.3 - Heading styles used in order


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Other Areas in the QM Rubric?

- General Standard 1
- General Standard 7
- 2.3 - Prominently located
- 3.2 - The presentation
- 3.3 - Detailed checklist
- 8.1 - Consistent layout and design

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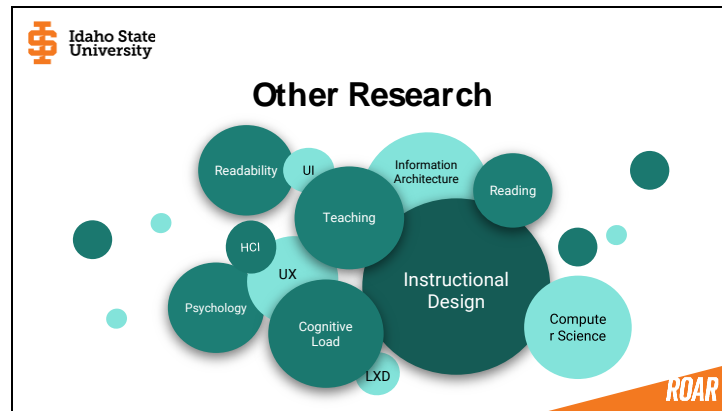


What About the Research?

- WCAG (Web Content Accessibility Guidelines)
 - Technical Standards
- UDL (Universal Design for Learning)
 - Provide Options for Comprehension
 - Activate or supply background information (3.1)
 - Highlight patterns, critical features, big ideas, and relationship (3.2)
 - Guide information processing and visualization (3.3)
 - Maximize transfer and generalization (3.4)

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[The UDL Guidelines](#)
[Web Content Accessibility Guidelines \(WCAG\) 2.1](#)



Instructional Design Research comes from many sources

HCI

Information Architecture

Reading

Cognitive Load

Psychology

Computer Science

UI

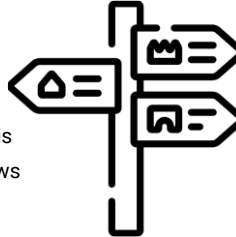
UX


LXD

Readability

What are Signals?


- | | |
|----------------------|--------------------|
| Headings | Page previews |
| Navigational buttons | Bold / Strong |
| Breadcrumbs | Italics / Emphasis |
| Hierarchical maps | Sentence previews |
| Progress bars | White space |






SARA Theory

The three-step analysis proposed by the SARA theory involves a thorough analysis of 1) the signals and their characteristics; 2) the relationship of the information to the goals of the learner; and 3) the cognitive limitations of the learner (Lemarié, Lorch Jr, et al., 2008). The following seven characteristics provide a thorough analysis of the signals and their characteristics: 1) a demarcation in the structural boundaries; 2) the hierarchical organization; 3) the sequential organization; 4) a label; 5) the identification of the topic; 6) the function; and/or 7) an emphasis on a specific portion (p.140-141). These seven characteristics provide a mechanism to enable comparisons across the research on signals.



Lemarié, J., Lorch Jr, R. F., Eyrolle, H. & Virbel, J. (2008). SARA: A text-based and reader-based theory of signaling. *Educational Psychologist*, 43(1), 27–48.

Lemarié, J., Lorch Jr, R. F. & Péry-Woodley, M.-P. (2012). Understanding how headings influence text processing. *Discours*, (10).



SARA Theory - with signals

Three Step Analysis	Seven Possible Characteristics
<ol style="list-style-type: none">1. Signals and their characteristics.2. Relationship of the information to the goals of the learner.3. Cognitive limitations of the learner.	<ul style="list-style-type: none">• Structural boundaries.• Hierarchical organization.• Sequential organization.• Label.• Identification of the topic• Function.• Emphasis on a specific portion.

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The three-step analysis proposed by the SARA theory involves a thorough analysis of 1) the signals and their characteristics; 2) the relationship of the information to the goals of the learner; and 3) the cognitive limitations of the learner (Lemarié, Lorch Jr, et al., 2008). The following seven characteristics provide a thorough analysis of the signals and their characteristics: 1) a demarcation in the structural boundaries; 2) the hierarchical organization; 3) the sequential organization; 4) a label; 5) the identification of the topic; 6) the function; and/or 7) an emphasis on a specific portion (p.140-141). These seven characteristics provide a mechanism to enable comparisons across the research on signals.


Your Invitation



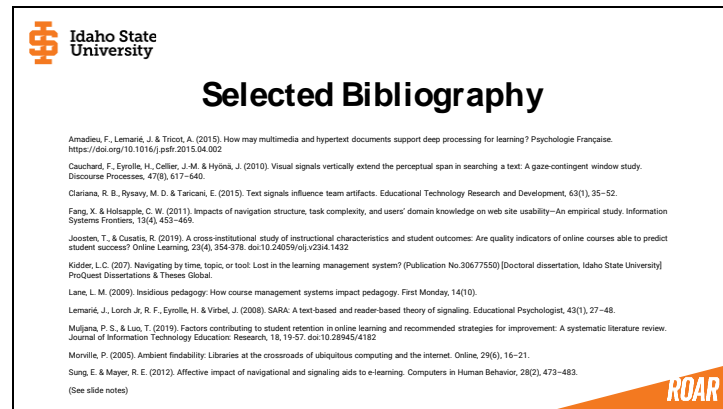
- Use styles when you create.
- Help others to use styles.

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Questions & Answers



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Amadiou, F., Lemarié, J. & Tricot, A. (2015). How may multimedia and hypertext documents support deep processing for learning? *Psychologie Française*.
<https://doi.org/10.1016/j.psfr.2015.04.002>

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Lemarié, J., Lorch Jr, R. F., Eyrolle, H. & Virbel, J. (2008). SARA: A text-based and reader-based theory of signaling. *Educational Psychologist*, 43(1), 27-48.

Lemarié, J., Lorch Jr, R. F. & Péry-Woodley, M.-P. (2012). Understanding how headings influence text processing. *Discours*, (10).

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Scheiter, K. & Eitel, A. (2015). Signals foster multimedia learning by supporting integration of highlighted text and diagram elements. *Learning and Instruction*, 36, 11-26.

Sung, E. & Mayer, R. E. (2012). Affective impact of navigational and signaling aids to e-learning. *Computers in Human Behavior*, 28(2), 473-483.



What if I Don't Like the Look ?


LMS

- Cohesive
- Consistent
- Accessible
- ISU Branding
- Improved student experience

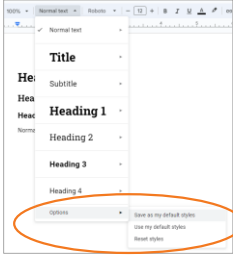
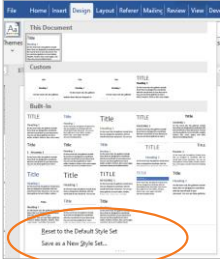
Other

- Explore the included options.
- Create your own style.

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Create a Style



The image displays two screenshots from Microsoft Word illustrating how to create a new style. The left screenshot shows the Styles pane with the 'Options' button at the bottom circled in orange. The right screenshot shows the 'Options' menu that appears when the button is clicked, with the 'Options' button itself circled in orange. The menu includes options like 'Save as my default styles', 'Use my default styles', and 'Reset styles'. The 'ROAR' logo is visible in the bottom right corner of the slide.

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What Does the Code Look Like?

Course Technologies

Please make sure you have installed and updated all the software and browser options in the following handouts:

- General Technology, Hardware, and Skills for Online/Hybrid Courses: Article
- General Software, Browser, Viewers and Plugin Requirements: Article

Microphone & Speakers

You will need a microphone and speakers to complete some of the activities and assignments.

Internet Connection

You will also need a consistent high-speed broadband internet connection in order to successfully complete this course.

Other Technologies

You will also have the opportunity to explore and experiment with various other free technologies, which will be indicated throughout the course.

```
<h4>Course Technologies </h4> <p>Please make sure you have installed and updated all the software and browser options in the following handouts:</p> <p></p> <ul> <li>General Technology, Hardware, and Skills for Online/Hybrid Courses: Article</li> <li>General Software, Browser, Viewers and Plugin Requirements: Article</li> </ul> <h4>Microphone & Speakers</h4> <p>You will need a microphone and speakers to complete some of the activities and assignments.</p> <h4>Internet Connection</h4> <p>You will also need a consistent high-speed broadband internet connection in order to successfully complete this course.</p> <h4>Other Technologies</h4> <p>You will also have the opportunity to explore and experiment with various other free technologies, which will be indicated throughout the course.</p>
```

- On the left, we can see “Course Technologies” is larger, in a heavier weight, and in a narrower font than the paragraph below.
- On the right, we can see that “Course Technologies” is a heading style, since it is surrounded by angle brackets and the h4 tag.
- Similarly, we can see that the words “Please make sure” is a paragraph, in a set of <p> tags.
- Spanning from the second to third lines on the right, we can see that “General Technology” is an unordered list, with two list items. and tags.
- Finally, we can see that the other three headings on the left are all h5, with paragraphs.
- If we wanted to change the font in all the headings—perhaps to make it less narrow, for instance—we could change the style associated with headings and apply it to all of these at once. We wouldn’t have to select each set of words individually and duplicate the work of swapping fonts and sizes.
- Because the two list items here are marked up as a “list” style, anyone who uses assistive technology will also hear that they are part of a list, rather than just hearing “bullet point” or something similar. If these were ordered lists, the indicator would automatically increment when you add another list item, and you could change all your lists to roman numerals, arabic numerals, or letters simultaneously if you’d like.