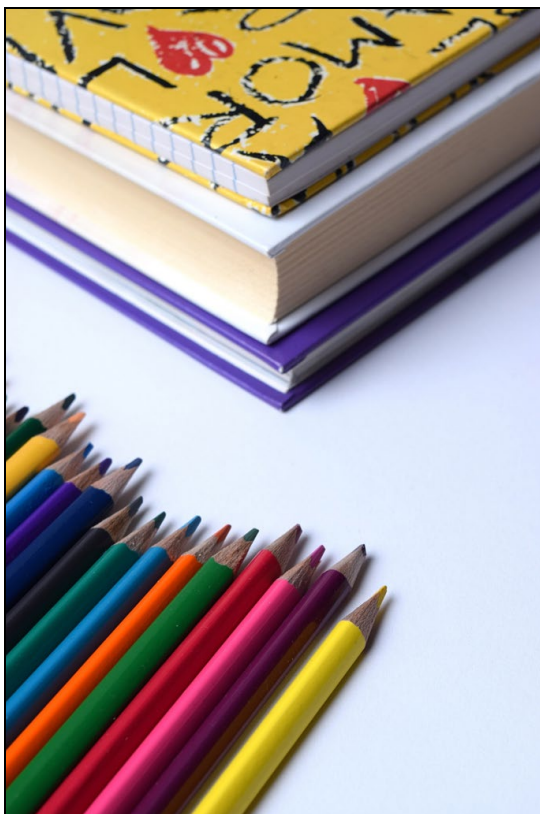


# Nuts and Bolts: Inclusive Library Instructional Practices using UDL Guidelines

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## Slide 1



## Nuts and Bolts: Inclusive Library Instructional Practices using UDL Guidelines

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Disability, Access, and Teaching  
A One-Day Symposium, April 10, 2019  
American University, Washington, DC

Universal Design for Learning (UDL) &  
Teacher Perspectives  
Roundtable

## Abstract

Librarians face challenges in designing and creating inclusive learning environment for students who are diverse not only in terms of age, race, sex, (dis)Ability, ethnicity, religion, political beliefs, but they are also different in the ways of how they learn. At the University of Maryland – College Park, librarians, teaching faculty and instructional designers are working together to create accessible content for eLearning and to reach out to a wider population of learners using recent technological tools and existing university's content management infrastructure. Digital technologies, online resources, and mobile devices coupled with the guiding principles of the Universal Design for Learning (UDL) Framework and the University of Maryland (UMD) Web Accessibility Guidelines allowed to tailor instruction practices to create an inclusive and accessible learning environment for every student. I incorporated various tools and resources in order to achieve the learning objectives set up for library instruction classes. In this presentation, I will provide practical tips and tricks for applying the UDL framework and web accessibility principles into my instruction efforts.

## Slide 2

### A little bit of myself



Created by Vectors Market  
from Noun Project



Created by Adrien Coquet  
from Noun Project

### A little bit of myself.

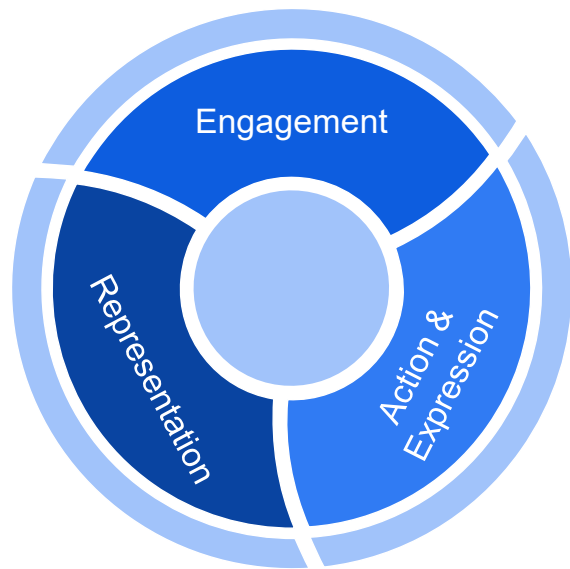
I am a librarian at the University of Maryland in College Park. I am responsible for providing services and building library collections in the public health and related disciplines. And yes, you can see on the slide on this image representing a person reading a book, and similarly I read all day long and not doing anything else. Well, then why I am presenting here today? While it's true that I read a lot, guess what I do for a living on the image representing a professor in a classroom with students. Correct! I also teach students how to find information for their research projects in one-shot instruction classes, as well in online environment. Being myself with a hearing disability, I am fully aware of the limitations

one can have in the academia from both a teacher and a student perspective.

## Slide 3

### UDL and Inclusivity

#### In the classroom



A colleague of mine introduced me to the UDL principles. This graph represents three of the UDL guidelines which are engagement, representation, and action & expression. I am trying to apply various pedagogical techniques to address different learning styles of students with all abilities. Some examples in any of these areas include:

#### Engagement

- Provide **an outline of my lecture** so students can take notes.
- **Arrange students in circles for group activities** so they can see one another's faces.

- Design my **own online materials** to provide diverse students with the opportunity to engage in learning that is most meaningful and motivating to them (audio to support print text, graphics to illustrate complex information, etc.).
- Provide **immediate assessment and feedback** (e.g. quizzes in online Canvas modules, surveys during in-class activities, after or during students' presentation of selected material, etc.)
- Make myself available to students in **flexible formats** (e.g., face-to-face, email, chat, WebEx, Skype, Google Hangouts, telephone).

## Representation

- Aim at delivering **engaging lectures** using Kahoot!, clickers, laser pointers, in-class group activities.
- **Send presentations slides** and handouts to students in **advance** of the instruction session.
- Offer students to present section of the material – use **elements of the “flipped classroom” approach**. I have used it in a PechaKucha format.
- Create a glossary of terms to explain library jargon.

## Action & expression

- **Encourage students to express knowledge and skills in a variety of ways** such as online quizzes, assessment in paper

format, oral presentations, in-class participation, group discussions and more.

- Provide students the opportunity **to choose which type of assignment they would like to complete** (e.g. when teaching Zotero, some students are already familiar with it but are not familiar in searching a specific database and vice-versa. They have the option to either master the citation tool or increase their searching skills).
- **Use of Kahoot!** or clickers will allow all students to participate without being centered out.

## Slide 4

### UDL and Accessibility

In the online  
classroom

**Consult the experts!**

Instructional designers  
with experience in  
accessible learning and  
quality assurance



Created by Adrien Coquet  
from Noun Project

I was invited by professors from the School of Public Health to design content with library resources to supplement their courses in the Learning Management System in Canvas. A few years ago, I tried to design these library modules as much accessible as possible providing videos with closed captions in addition to textual information. However, over time I learned about responsive web design which allows the web content to be viewed across different devices. BUT guess what?



## Slide 5

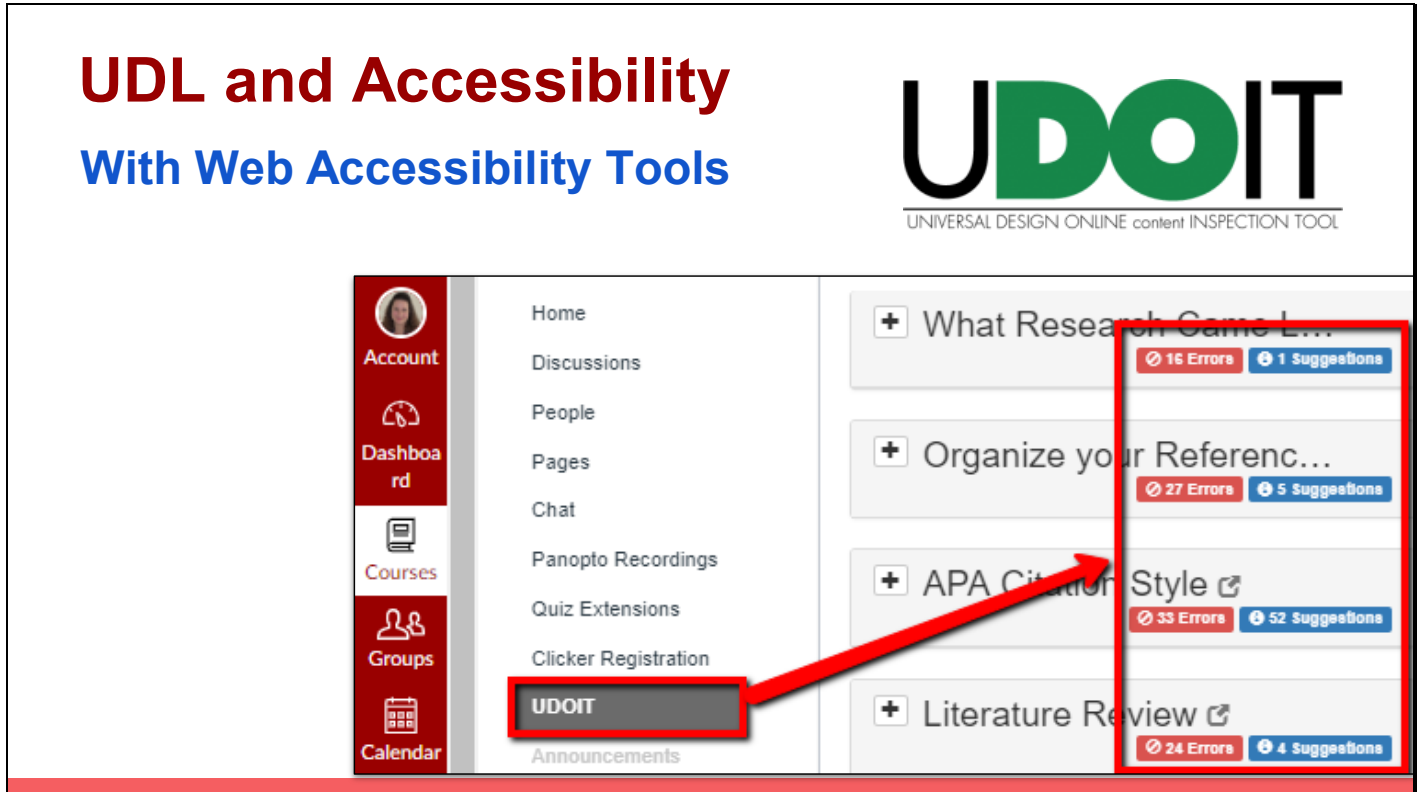
The image displays two versions of a course navigation interface. The left version is a desktop layout with a blue header 'LIBRARY RESOURCES' and a large image of a university building. Below the image is a navigation bar with icons and labels for 'Introduction', 'Module 1', 'Module 2', 'Module 3', 'Module 4', 'Module 5', 'Module 6', and 'Quizzes'. At the bottom, an orange navigation bar contains links for 'Home', 'Introduction', 'Module 1', 'Module 2', 'Module 3', 'Module 4', 'Module 5', and 'Module 6'. The right version is a mobile layout with a similar header and image. The navigation bar is replaced by a vertical list of options: 'Introduction', 'Module 1', 'Module 2', 'Module 3', 'Module 4', 'Module 5', 'Module 6', and 'Quizzes'. The orange navigation bar at the bottom is also present but the text is smaller and less legible.

This slide shows a layout of the course I have designed with a navigation bar on the bottom in a table format labeled in orange. While it is nice to have it there, when seen on a mobile device, this table transforms in a difficult to navigate list of tabs. When consulting with an instructional designer, she advised to use the built in tools within the Canvas course page to create a web responsive page as shown on the right. All listing is nicely ordered in an easy accessible list of options.

## Slide 6

# UDL and Accessibility

## With Web Accessibility Tools



UNIVERSAL DESIGN ONLINE content INSPECTION TOOL

Account  
Dashboard  
Courses  
Groups  
Calendar

Home  
Discussions  
People  
Pages  
Chat  
Panopto Recordings  
Quiz Extensions  
Clicker Registration  
**UDOIT**  
Announcements

+ What Research Came L...  
16 Errors 1 Suggestion

+ Organize your Referenc...  
27 Errors 5 Suggestions

+ APA Citation Style  
33 Errors 52 Suggestions

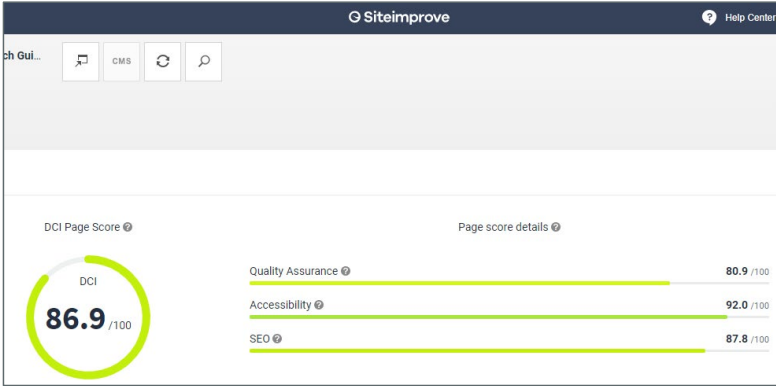
+ Literature Review  
24 Errors 4 Suggestions

This slide shows a layout of the course with UDOIT tool embedded in the Canvas course. When you run it on your course, it will run a report listing the problematic areas with suggestions on how to fix them. You may want to check at your institutions to see if you have it available because it's a subscription base.

## Slide 7

# UDL and Accessibility

**Siteimprove Web Accessibility Checklist**



Metric	Score
DCI Page Score	86.9 /100
Quality Assurance	80.9 /100
Accessibility	92.0 /100
SEO	87.8 /100


## DIY- IT Accessibility

The University of Maryland is committed to creating and maintaining a welcoming and inclusive educational and working environment. Consistently completing these six steps when creating online content improves accessibility and gives all members of our community equal access to information and services.

### SIX Essential Steps

- 1 Headings**  
Format headings to structure pages or documents.  
Heading 1  
Heading 2  
Heading 3  
Heading 4  
Heading 5
- 2 Links**  
Make link text descriptive, not generic.
- 3 Color & Contrast**  
Verify adequate color contrast. Avoid using color alone to convey meaning.
- 4 Images**  
Provide meaningful alternative (alt) text descriptions for images.
- 5 Tables**  
Create tables with column and/or row headers.
- 6 Media**  
Add captions to videos or provide a transcript.

For a text version of this document and more information, visit the IT Accessibility website at [itaccessibility.umd.edu](https://itaccessibility.umd.edu) or contact us at [itaccessibility@umd.edu](mailto:itaccessibility@umd.edu).



Other tools include checklists and guidelines developed by your institutions, as well as the Siteimprove tool which can help you address issues impacting your site's accessibility, content quality, and more.

**For more information:** <https://itaccessibility.umd.edu/>

- DIY\_IT Accessibility handout - <https://itaccessibility.umd.edu/sites/default/files/AccessibilityHandout2-6-19.pdf>
- SiteImprove Accessibility Handbook - [http://go.siteimprove.com/hubfs/Content/eBooks\\_Guides\\_Whitepapers/EN\\_Accessibility\\_Handbook.pdf?t=1491229891592](http://go.siteimprove.com/hubfs/Content/eBooks_Guides_Whitepapers/EN_Accessibility_Handbook.pdf?t=1491229891592)

## Slide 8



## Acknowledgments

**Susan B. Johnston**

Instructional Designer, Accessible Learning

**Jun Yang**

Instructional Designer, Quality Assurance

**Louisa Nkrumah**

Learning Experience Designer

Check the resources available at your institutions that can assist you in making your online content accessible for people with disabilities. I have met with instructional designers, as well with the University of Maryland Libraries web designer who have guided me through the maze of the accessible principles and technologies.

Thank you.

# THANK YOU!



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Here is my contact information if you have any thoughts or questions. Thank you for your attention.