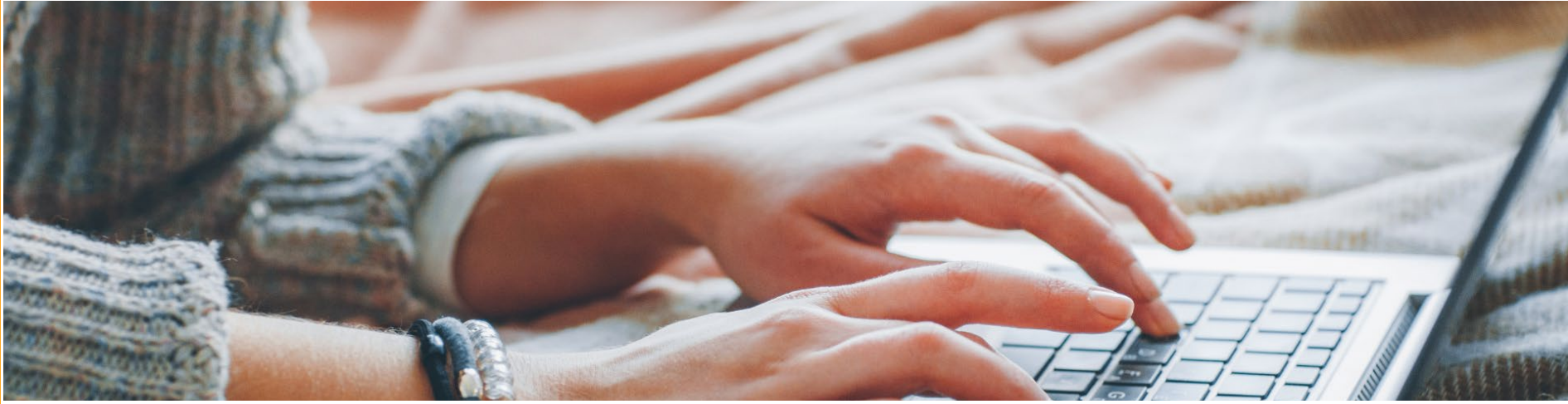**Nutrition and Aging**
Resource Center

Enhancing Accessibility and Learning: Utilizing the POUR Principles with Mayer's 12 Principles for Effective Multimedia Design
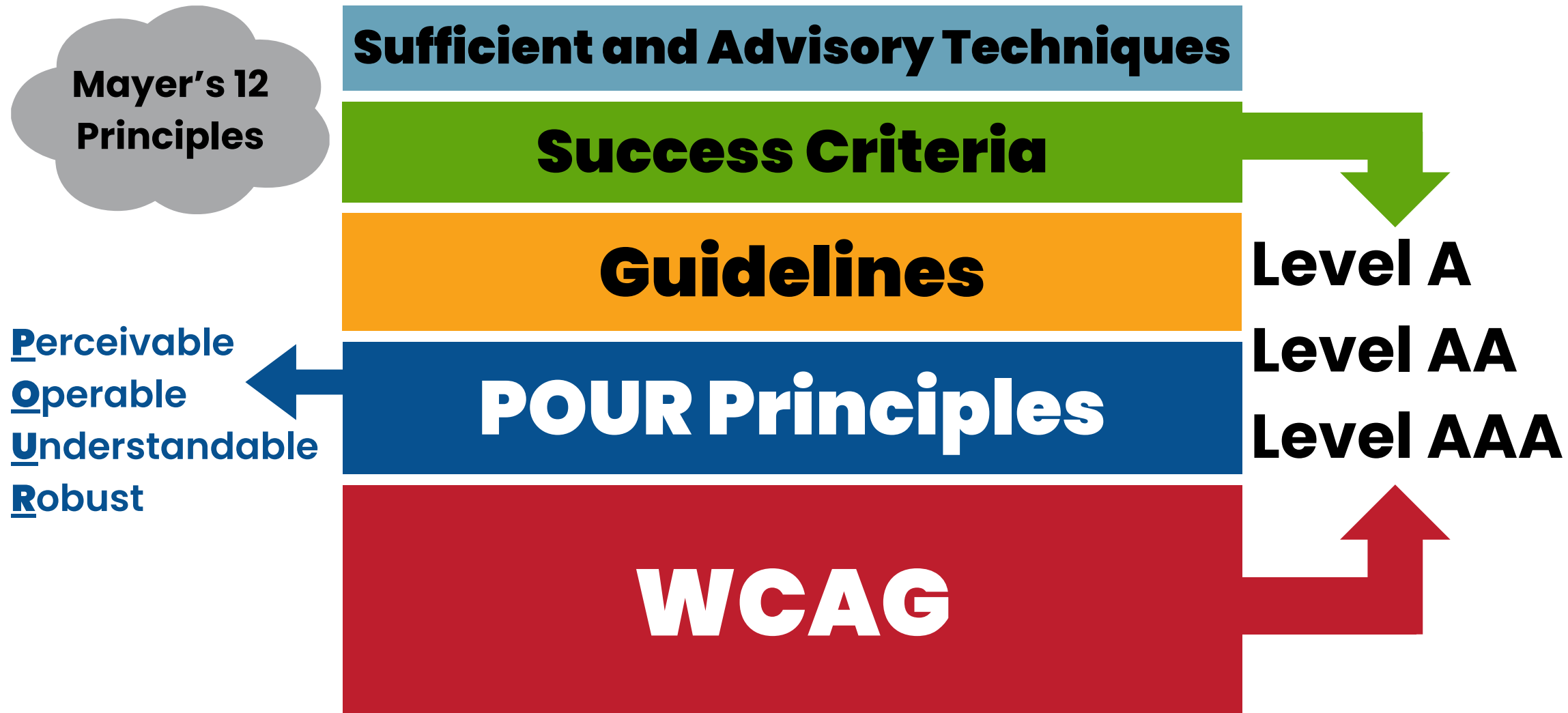
May 2025

Who am I?

Agenda

Overview of what will be covered today

- Introduction to multimedia learning and accessibility

- Overview of Mayer's 12 Principles

- How these principles can support accessibility in content design

How does everything work together?

Mayer's 12 Principles

Sufficient and Advisory Techniques

Success Criteria

Guidelines

Perceivable
Operable
Understandable
Robust

POUR Principles

WCAG

Level A
Level AA
Level AAA

What is accessibility?

Accessibility in the context of multimedia learning

- Visual impairments

- Auditory impairments

- Cognitive impairments

- Motor impairments

- Learning styles and varied cognitive processes

- Neurodiversity

- Situational disabilities

- Age-related challenges

What is multimedia learning?

Mayer's 12 Principles

- **Cognitive Load Principles:**
  - Coherence, Signaling, Redundancy, and Contiguity

- **Active Learning Principles:**
  - Modality, Multimedia, Personalization, and Segmenting

- **Transfer of Learning Principles:**
  - Pre-training, Self-explanation

- **Content Organization Principles:**
  - Spatial Contiguity, Temporal Contiguity, Consistency

Why does it matter?

- Simplifying complex information

- Providing multiple ways to engage with content

- Ensuring clarity and consistency

In Summary

Mayer's 12 Principles

- Clear, concise, and engaging content
- Reduce cognitive load and facilitates learning

Web Content Accessibility Guidelines

- Provide technical standards for accessibility

BOTH

- Ensure inclusive content is being made to meet the needs to ALL learners

Key takeaways

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Questions?

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Section508.gov

2024 Updates

- [Best practices for creating and updating accessibility statements including examples](#)

- [Best practices for establishing and maintaining a public feedback mechanism](#)

- [Best practices for establishing and maintaining a formal Section 508 complaint process](#)

- [Considerations for Publishing a Page to the Web](#)

- [Common PDF Tags and Their Usage](#)

- [Creating Accessible Email Messages](#)

- [Designing Digital Content for Users With Cognitive Disabilities](#)

WCAG in Plain English

Download the WCAG in Plain English postcard from CHAX Accessibility Training.

https://www.accessibilityunraveled.com/wcag-in-plain-English/

Resources

[Home | Section508.gov](#)

[A Guide To The POUR Principles Of Accessibility – Venngage](#)

[Plain Language Materials & Resources | Health Literacy | CDC](#)

[Technology Accessibility Playbook | Section508.gov](#)

[Accessibility Training, Tools, and Events | Section508.gov](#)

[Chax Accessibility Training](#)

[504 FAQ | Accessibility | Social Security Administration](#)

[Mayer's 12 Principles of Multimedia Learning | DLI](#)

[Plain Language](#)

[Section 508: What Is It and Why Is It Important? | Section508.gov](#)

[Understanding WCAG 2.2 | WAI | W3C](#)

Thank You