

Online Learning for the Neurodivergent Student: From Theory to Practice

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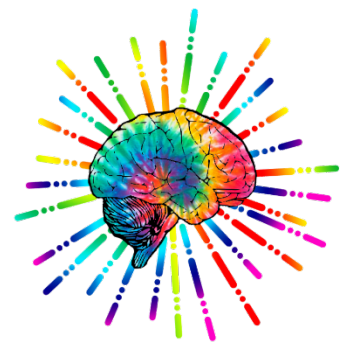
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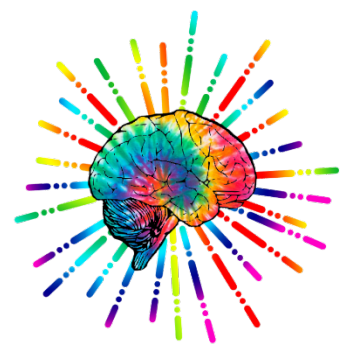
LC ONLINE
LANDMARK COLLEGE



Today's Agenda

- Online Learning: Assumptions and Myths
- Extraneous and Intrinsic Cognitive Load
- Designing with Students in Mind
- Course Design Considerations for Students with LDs
- Q & A





Audience Questions

Have you taken an
online class?

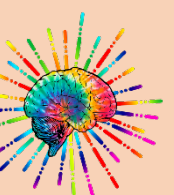


(Show of Hands)

How did it go?

(Thumbs up or 

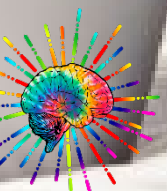
Thumbs down) 





What assumptions do you have about online learning for students with learning struggles?

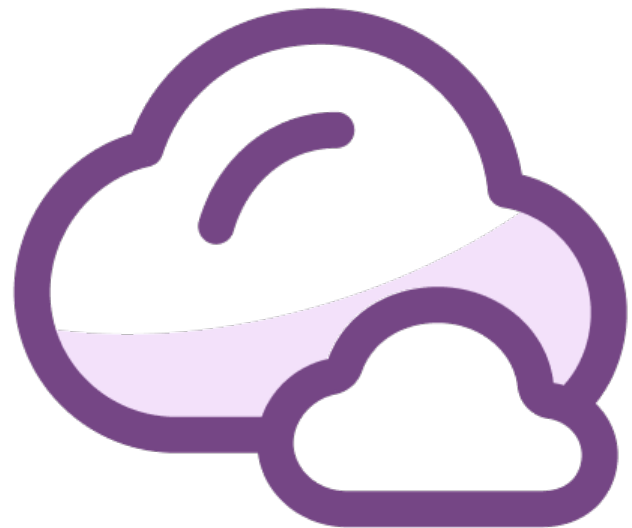
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What assumptions do you have about online learning for students with learning struggles? POLL RESULTS

Inaccessible
Course Design

Cognitive
Overload

Reduced
Distractions



Review: Cognitive Load

Examples of determinants for Extraneous Load in an Online Course:

- Unclear navigation
- Inconsistent layout
- Lack of clear instructions
- Long blocks of text
- Overcomplicated assignments
- Poor fonts
- Complicated vocabulary
- Unnecessary details

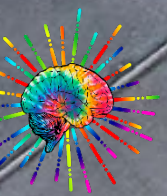
Examples of determinants for Intrinsic Loads in an Online Course:

- Complexity of the subject matter
- Prior knowledge
- Interactive, multimodal activities
- Real-world relevance



Activity

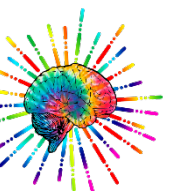
Help students focus on the core elements of a learning task.



Meet Angela



Angela struggles with **extreme cognitive fatigue** when she reads large amounts of text. When this happens, her **capacity to process information** becomes a barrier. She is a curious person by nature and has many great ideas but begins to feel discouraged when her courses require her to rely primarily on books and articles to learn new information.



Lesson Title: “Finding and Evaluating Sources”

Lesson Overview: This is an online, asynchronous activity that is part of a scaffolded series of activities designed to help students complete an annotated bibliography (on a chosen topic related to digital literacy).

Audience: First-year college students enrolled in an online digital literacy course.

Learning Goal(s): Students use a library database to locate relevant sources about their chosen topics and evaluate those sources using the CRAP test (a method of evaluating sources based on Currency, Reliability, Authority, and Purpose/Point of View).

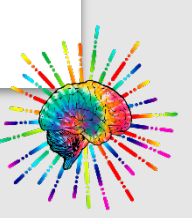
1 Angela’s Learning Strengths:

2 Sources of Intrinsic Load:

3 Sources of Extraneous Load:

Recommended Modification to Reduce Extraneous Load:





Putting Research to Practice

Landmark
Pedagogical
Principles

Universal
Design

Community of
Inquiry

Quality
Matters

Online
Learning
Consortium

Backwards
Design

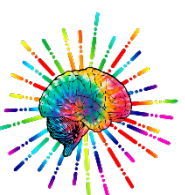
Design
Thinking

WCAG 2.0
Accessibility

Student Data

Faculty
Perspectives

Advisor Input





Course Design Considerations for Students with LDs

1. Student and Faculty “Readiness” for Online Learning – prepare in advance
2. Consistent Course Structures and Intuitive Navigation
3. Alignment of Objectives & Assessments (the purpose of the activity is explicit)
4. Just-in-time Learning (built-in tips, checklists, examples)
5. Instructor Presence and Feedback Loops
6. Accessible Course Content
7. Engaging, culturally relevant, and experiential activities
8. Self-monitoring tools (study schedules, weekly reflections, calendars)



LC Online Dual Enrollment: Retention & Passing Rates

Retention Rates

- 91% of DE students complete our courses

91%
Retention

Passing Rates

- 94% of DE students that complete, pass our courses with a D- or better

96% Pass





Questions.

