LINCS Moodle: Teaching Energy Literacy to Adult Learners Accessibility Assessment

Date of Review: 02/13/24

Date of Revalidation 03/01/24

Reviewers:
- Harathi Guddeti
- Anik Hossain

Attendees:

Testing tools and technologies:
- Colour Contrast Analyser
- JAWS 2022
- WAF
- Axe
- ANDI
- Windows 10
- Google Chrome

Accessibility Assessment Notes:
1. The issues highlighted are representative samples of the assessment. While applying the fix, make sure to apply the fixes to all the incidents throughout the site.

Scope:
- Complete course – Unit 1, 2, 3, 4, 5, 6

Note:
- Is it an Internal and External facing – Both
- Approximate no. of users – Many
- FSA application – No

Issues:

1. Image of text and text alternative

Issue Description:

- Image of text is used to present the "Energy Literacy Principles"
- Text alternative of the image is marked as null and the seven principles are missed by AT users

Screen(s):

- Unit 1: Introduction -> What is Energy Literacy
- Unit 3: Energy Flow -> Strategies for Teaching Principle 2

Source Code:

```
<img alt="" class="img-img img-img--center img--zoom" role="img"
src="assets/Z3UTXF5aOs3IadF0_Ar8h61CaY5Yi99Aa.png">
```

Recommendation: Either replace the image in actual text form or ensure text description of the principles is presented on the page.

Success Criteria: 1.1.1 Non-Text Content, 1.4.5 Image of Text

Impact: Serious

[Revalidation 03/01/24] – Resolved

2. Link purpose

Additional example:

Issue Description: Assistive technology users often encounter links outside of the surrounding context. When the links are accessed the document name and links to be visited website name is not associated besides the "Go To PDF/Go To Website" links.

Screen(s): Globally

- Unit 1: Introduction -> What is Energy Literacy
- Unit 3: Energy Flow -> Strategies for Teaching Principle 2, Strategies for Teaching Principle 3
- Unit 4: Energy Sources and Decisions
- Unit 5: Energy Use and Society

Source Code:

```
<a class="blocks-button__button"
href="https://www.energy.gov/eere/education/articles/energy-literacy-framework-
50-march-2017-english" rel="noopener noreferrer" tabindex="0" target="_blank"
```

```
aria-label="Go to PDF (opens in a new tab)" style="--color-button-bg: #9f2a25; --
color-button-text: #fff; --color-button-border: transparent;">Go to PDF</a>

<a class="blocks-button__button"
href="https://www.energy.gov/eere/education/articles/energy-education-resources-
spanish" rel="noopener noreferrer" tabindex="0" target="_blank" aria-label="Go to
Website (opens in a new tab)" style="--color-button-bg: #9f2a25; --color-button-
text: #fff; --color-button-border: transparent;">Go to Website</a>
```
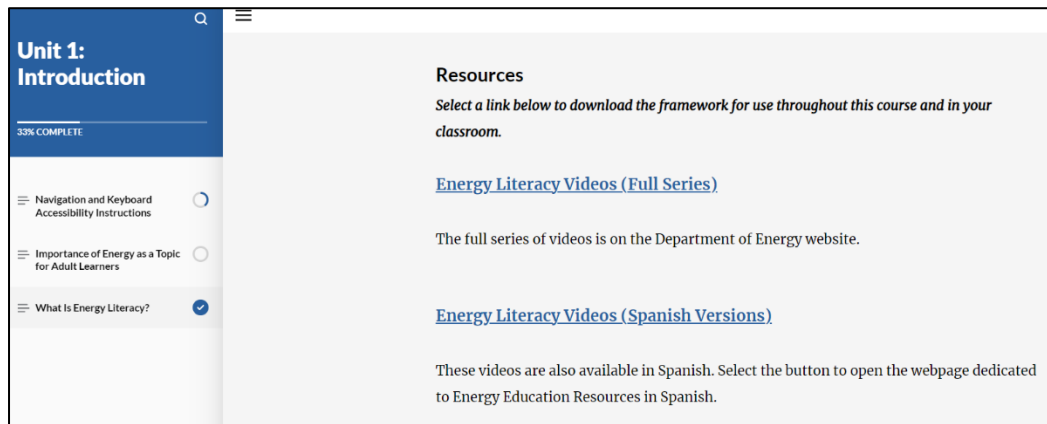
Recommendation: Add an aria-label to each ambiguous <a> to describe the document name/link name programmatically.

Success Criteria: 2.4.4 Link Purpose

Impact: Minor

[Revalidation 03/01/24] – Resolved

3. Bold/Style for headings

Issue Description: Headings that introduce content sections are not marked as a heading.

Screen(s): Globally

- Unit 1: Introduction
- Unit 3: Energy Flow
- Unit 4: Energy Sources and Decisions
- Unit 5: Energy Use and Society

Recommendation: Ensure that headings introduce content sections are properly marked up as headings (<h1> - <h6>).

Success Criteria: 1.3.1 Info and Relationships

Impact: Minor

[Revalidation 03/01/24] – Resolved

The following online resources provide useful information related to Principle 2:

Energy Flows Curriculum Guide

Developed by the National Energy Education Development (NEED) Project, this guide is one of many NEED Project resources that could be included in this course. The NEED Project curriculum guides support the Next Generation Science Standards and have been correlated to the Common Core State Standards as well as individual state standards. More than 100 guides are organized by grade level, topic, and subject area, providing a secondary opportunity to showcase language arts, social studies, and math lessons that incorporate energy literacy content.

NEED Teacher Resources

The Educator section of the NEED website features a collection of teacher resources.

Climate Change Resources

The U.S. Environmental Protection Agency maintains a page of Climate Change Resources for educators and students.

CLEAN: Principle 2

For more information about the science behind this principle and a catalog of activities searchable by level to teach this principle, visit the page for Principle 2 on the CLEAN website.

4. Videos transcript links
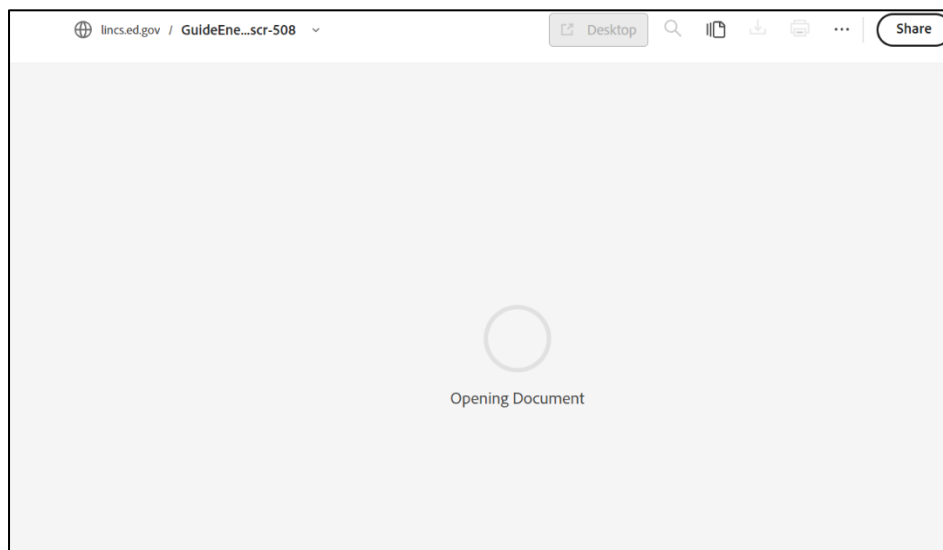
Issue Description: None of the transcript links opened any documents during assessment.

Screen(s): Globally

Recommendation: Ensure transcript link is not broken and functions as expected.

Success Criteria: Functional

<mark>**[Revalidation 03/01/24] – Same result as reported**</mark>

<mark>**Follow up:** ITAP determined this as not an issue in a 4/16/2024 meeting. – (Carolyn Lampila)</mark>

5. Untagged PDF's

Issue Description: PDF's does not contain semantic tags, rendering it not accessible.

Note: We noticed most of the documents not being 508 compliance, ITAP has a separate assessment team who will look after the documents testing please reach Denise.McGland@ed.gov for further assistance

PDF(s): Globally

Recommendation: Ensure all PDF documents have tag structure.

Success Criteria: 1.3.1 Info & Relationships

Impact: Critical

==[Revalidation 03/01/24] – Issue has been closed==

PT statement "Our contract partners conducted 508 compliance reviews of all PDFs (course handouts and transcripts) were reviewed for accessibility, and compliance reports are linked within a hidden (non-student) module within the course"

508 Issue Ratings (severity)

Critical
This issue results in blocked content for individuals with disabilities. Until a solution is implemented content may be completely inaccessible, making your organization vulnerable to legal action. Remediation should be a top priority.

Serious
This issue results in serious barriers for individuals with disabilities. Until a solution is implemented some content will be inaccessible, making your organization vulnerable to legal action. Users relying on Assistive Technology will experience significant frustration when attempting to access content. Remediation should be a priority.

Moderate
This issue results in some barriers for individuals with disabilities but would not prevent them from accessing fundamental elements or content. This might make your organization vulnerable to legal action. This issue must be resolved before a page can be considered fully compliant.

Minor
This is considered an Accessibility issue that yields less impact for users than a moderate issue. For a page to be considered fully compliant this issue must be resolved but can be dealt with last.