



Humber College PSYCH 2000 Course and LMS Accessibility Report

March 7, 2022



Accessibility Audit Report

04/03/2022

www.adwebkey.com





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Project overview

Website/Application Tested: Simple Movement Learning Management System (LMS)

Landing Page: https://learn.humber.ca/ultra/courses/_193737_1/outline

Date Tested: 04/03/22

Scope of test: 4 pages selected as a representation of the website

Guidelines title, version and URI: Web Content Accessibility Guidelines 2.1 at <https://www.w3.org/TR/WCAG21/>

Conformance Level satisfied: None

Technologies relied on: HTML, CSS, JavaScript, WAI-ARIA

Primary Browser: Chrome 98.0.4, Firefox 97

Methodology and Review Rationale

This evaluation constitutes an accessibility overview of the LMS based on 4 pages targeted for evaluation. These pages were selected by ADWebKey and agreed on the client as representative of the overall accessibility and functionality of the LMS. The evaluation has been evaluated in accordance with the WCAG Evaluation Methodology (WCAG-EM) which can be viewed at <http://www.w3.org/TR/WCAG-EM/>.

The pages have been audited manually and cross-checked using a team of website evaluators in order to ensure that the results and comments presented are valid and comprehensive.

Summary

The chief accessibility issues include:

- Informative images of text with insufficient alt text
- Input fields with insufficiently descriptive aria-labels
- Errors found using W3C Nu Validation Service and filtered to indicate WCAG errors only
- No meaningful titles for iFrames



Remediation

In order to facilitate the remediation of the accessibility violations located, we would suggest that one method could be to attend to Level A violations first, followed by AA and then AAA. Accordingly, here are the issues shown in the WCAG summary by WCAG Success Criteria levels.

It is important to note that in order to pass Level AA, all of the issues in Level A must also be satisfied. To pass Level AAA, all of the issues in Level A, AA, and AAA must be satisfied.

It is also important to fix these issues across the entire website and not just in the pages which have been assessed in order to be able to state any level of compliance, as the sample set of pages is indicative rather than exhaustive.

Level A Criteria	Number of pages with fails
1.1.1 Alternative text: Add descriptive alt text for informative images and apply null alt text to decorative images so they can be ignored by screen reader users	4
4.1.1 Parsing: Investigate errors identified using W3C Nu Markup Validation Service and then filtered to remove non-WCAG validation errors	4
4.1.2 Name, role, value: Ensure labels are meaningful Ensure iFrames have meaningful titles	3
1.4.1 Use of colour: Provide information which is not communicated solely based on color. Provide higher colour contrast for buttons, links Colour is used to show the state of a link, it needs to be communicated in some other way as well, such as underlined.	2
2.1.1 Keyboard: Provide keyboard only access to all areas	2
3.3.2 Labels or instructions: Provide labels or instructions when content requires user input	2



Level AA Criteria	Number of pages with fails
1.4.5 Images of text: Avoid using images of text, where unavoidable provide alt text to give users the required information. Images of text are allowed for essential content such as the logo.	4
1.4.11 Non-Text Contrast: Ensure all User Interface components have a colour contrast ratio of at 3:1 with the background	3
1.4.3 Contrast (Minimum): Amend text colours to meet contrast requirements	2
2.4.5 Multiple Ways: Provide multiple ways to find other web pages on the site i.e.: table of contents, site map, site search, or list of all available web pages.	2
2.4.7 Focus visible: Amend focus state so that it is visible for mouse and keyboard	1
4.1.3 Status Messages: Ensure the text feedback is given an appropriate role for a status message	1



Executive Summary

An accessibility audit was conducted by ADWebKey of the Simple Movement LMS. Individual pages were selected by ADWebKey and agreed on by the client as an overview of the overall accessibility and functionality of the LMS. These pages have been listed in this document.

The purpose of this accessibility overview is to form an initial baseline of compliance with the Web Content Accessibility Guidelines Version 2.1 (WCAG 2.1) to Level AA. This document highlights accessibility barriers that were identified during the audit process.

The findings of the audit demonstrate that some work is required on this LMS before it can pass WCAG 2.1 to Conformance Level AA. These guidelines, created by The World Wide Web Consortium Web Accessibility Initiative (W3C WAI), state a website passes the requirements of Conformance Level AA when it passes both Conformance Levels A and AA.

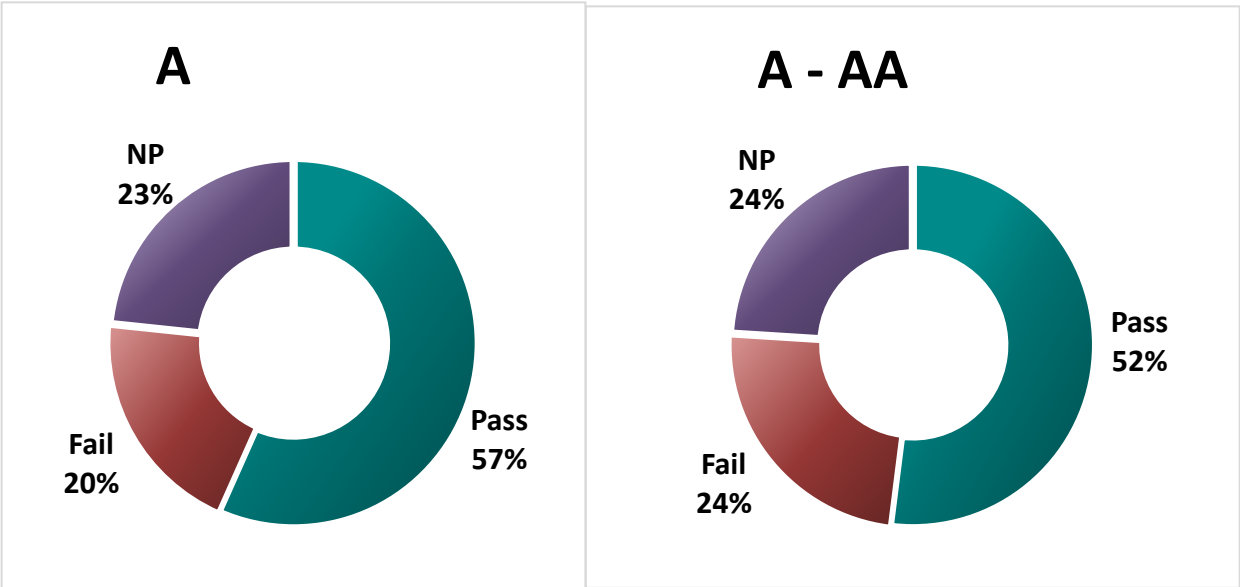
Detailed recommendations are provided throughout this document, describing the steps required to improve the accessibility of this website.

It is important to note that the pages selected for the testing sample are not deemed to be indicative of the LMS as a whole by ADWebKey and the client. Consequently prior to re-testing, it is important that the corrections are implemented on all pages, not just those in the sample. Other functionality on the LMS should also be tested if it has not been included in these pages.

The compliance level for the pages checked are provided in the figure below. At the time of testing, the application clearly passed 76% of the Success Criteria for WCAG 2.1 to Level AA. Breaking this analysis down further, the graphs in the figure demonstrate that the application passes 80% of Level A and 76% of Level A-AA.

It is particularly important to point out that if even one page fails a criterion, then the evaluation would record a grade of 'fail'. Conversely, if that one page is corrected, it would change the rating to 'pass' which would be reflected in the overall statistics.

Please note: NP indicates the item tested for that success criterion is not present and is considered a 'pass' in WCAG.



Grade	A		A-AA	
Pass	17	57%	26	52%
Fail	6	20%	12	24%
NP	7	23%	12	24%
Total	30	100%	50	100%



Disclaimer

The data that appears in the following report and its appendices has been expressly prepared for the sole use of Simple Movement by ADWebKey and are for the purpose of providing information to Simple Movement in relation to the website provided to ADWebKey as part of its preliminary investigations. The report discusses and indicates results which were valid at the time of evaluation.

The sample has been measured against the official World Wide Web Consortium, Web Accessibility Initiative (W3C WAI) guidelines including:

- Web Content Accessibility Guidelines (WCAG) Version 2.1 <https://www.w3.org/TR/WCAG21/>
- How to Meet WCAG 2.1 <https://www.w3.org/WAI/WCAG21/quickref/>
- Techniques for WCAG 2.1 <https://www.w3.org/WAI/WCAG21/Techniques/>
- Understanding WCAG 2.1: A guide to understanding and implementing Web Content Accessibility Guidelines <https://www.w3.org/WAI/WCAG21/Understanding/>
- W3C Markup Validation Service <http://validator.w3.org/>
- WCAG – Evaluation Methodology: <http://www.w3.org/TR/WCAG-EM/> (Latest Public Working Draft)

WCAG 2.1 has been designed to be more testable than its predecessor, WCAG 1.0, WCAG 2.0. However, while some tests can be accurately performed with the aid of automated testing, some require a combination of automated tools and human judgement, and others rely solely on human judgement by knowledgeable website assessors. In such cases, there is always a possibility that results may be disputed among assessors. Every reasonable effort has been made to cross-check findings and to ensure the validity of the results presented in order to mitigate the possibility of oversights. However, due to the human element of website evaluation, errors may, on occasion, occur. These errors, should they have occurred, should not materially affect the information or conclusions outlined in the results presented.



Page List

Page #	Tab/Title	URI	Short Title
1	Content	https://learn.humber.ca/ultra/courses/_193737_1/outline	Outline
2	Module 1 Overview	https://learn.humber.ca/bbcswebdav/pid-12322483-dt-content-rid-126679199_1/courses/mstru_PSYC2000_V1_F21/READ_ONLY/content/Module%201/04.html	Introduction to Lifespan Development content
3	Module 2 Self-Check	https://learn.humber.ca/bbcswebdav/pid-12338199-dt-content-rid-126976216_1/courses/mstru_PSYC2000_V1_F21/READ_ONLY/content/Module%202/08.html	Biological Beginnings and Physical Development - Self-Check
4	Module 1 Overview	https://learn.humber.ca/bbcswebdav/pid-12322575-dt-content-rid-126680302_1/courses/mstru_PSYC2000_V1_F21/READ_ONLY/content/Module%201/07.html	Introduction to Lifespan Development - Self-Check



Individual WCAG Issues by Screen

P#	Page Short Title	Success Criteria	Issue
1	Outline	Text Alternatives	The image of text in the "Lifespan Development" hero banner is an informative image that is being presented as a background image. Because of this, it is not available to assistive technology users
1	Outline	Images of Text	The image of text in the "Lifespan Development" hero banner is an informative image of text that is being presented as a background image
1	Outline	Non-Text Contrast	Colour contrast #1, #2
1	Outline	Keyboard	There is no keyboard access to the floating help linked icon
1	Outline	Parsing	Errors found using W3C Nu Validation Service and filtered to indicate WCAG errors only
1	Outline	Name, Role, Value	<p>The content containers in the main content have aria-describedby by references applied but the targets for the references do not exist</p> <p>The floating help icon is a clickable element with ARIA hidden applied, because of this, the icon and its function is hidden from assistive technology and keyboard users</p>
1	Outline	Status Messages	While there is keyboard access to moving the course content, there is no information presented to non-visual assistive technology users informing them of where they are moving the content to as they do it
2	Introduction to Lifespan Development content	Text Alternatives	The "Lifespan Development" image at the top of the main content has an alt of "Course Banner Image"
2	Introduction to Lifespan Development content	Images of Text	The "Lifespan Development" image of text has insufficient alt text
2	Introduction to Lifespan Development content	Multiple Ways	There is no search feature or sitemap present
2	Introduction to Lifespan Development content	Parsing	Errors found using W3C Nu Validation Service and filtered to indicate WCAG errors only



P#	Page Short Title	Success Criteria	Issue
3	Biological Beginnings and Physical Development - Self-Check	Text Alternatives	The "Lifespan Development" image at the top of the main content has an alt of "Course Banner Image"
3	Biological Beginnings and Physical Development - Self-Check	Use of Colour	Colour contrast #5
3	Biological Beginnings and Physical Development - Self-Check	Contrast (Minimum)	Colour contrast #6
3	Biological Beginnings and Physical Development - Self-Check	Images of Text	The "Lifespan Development" image of text has insufficient alt text
3	Biological Beginnings and Physical Development - Self-Check	Non-Text Contrast	Colour contrast #3, #4, #7
3	Biological Beginnings and Physical Development - Self-Check	Keyboard	There is no way to complete the self-check activity via keyboard when a screen reader is turned on as it requires the use of the same keys as the screen reader requires for navigation
3	Biological Beginnings and Physical Development - Self-Check	Focus Visible	There is no search feature or sitemap present
3	Biological Beginnings and Physical Development - Self-Check	Labels or Instructions	The aria-labels provided for each drop-zone provide insufficient information as to what information is needed to be entered into each field
3	Biological Beginnings and Physical Development - Self-Check	Parsing	Errors found using W3C Nu Validation Service and filtered to indicate WCAG errors only



P#	Page Short Title	Success Criteria	Issue
3	Biological Beginnings and Physical Development - Self-Check	Name, Role, Value	<p>The drop-zones provided in the main content have aria-labels that inform the user what number the drop down is, however, this is not informative of which question the drop-zone field applies to.</p> <p>There is no title for the iFrame present in the main content</p>
4	Introduction to Lifespan Development - Self-Check	Text Alternatives	The "Lifespan Development" image at the top of the main content has an alt of "Course Banner Image"
4	Introduction to Lifespan Development - Self-Check	Use of Colour	Colour contrast #5
4	Introduction to Lifespan Development - Self-Check	Contrast (Minimum)	Colour contrast #6
4	Introduction to Lifespan Development - Self-Check	Images of Text	The "Lifespan Development" image of text has insufficient alt text
4	Introduction to Lifespan Development - Self-Check	Non-Text Contrast	Colour contrast #4
4	Introduction to Lifespan Development - Self-Check	Multiple Ways	There is no search feature or sitemap present
4	Introduction to Lifespan Development - Self-Check	Labels or Instructions	The aria-labels provided for each input field provide insufficient information as to what information is needed to be entered into each field
4	Introduction to Lifespan Development - Self-Check	Parsing	Errors found using W3C Nu Validation Service and filtered to indicate WCAG errors only
4	Introduction to Lifespan Development - Self-Check	Name, Role, Value	<p>The aria-labels for the input fields in the main only state which number, out of 24, each particular input field is. This is not informative of which question the input fields appl.</p> <p>There is no title for the iFrame present in the main content</p>



Colour Contrast

How to interpret this section

Ratio - The ratio column is the Contrast Ratio between the two colours.

Usage - Where and how the colour combination is used on the web page.

The required contrast for text against background for AA is 4.5:1 for normal text and 3.1 for large text.

Large text is considered to be 24 px and over or 19 px bold and over

When color alone is used to convey information such as words that are links in a paragraph, a contrast of 3:1 is required at the AA level

Active user interface components (i.e., controls) and meaningful graphics must meet 3:1 contrast ratio to be distinguishable

Colour Contrast Reference Number	Hex	Hex	Ratio	Text AA 4.5:1	Large Text AA 3:1	Text AAA 7:1	Large Text AAA 4.5:1	Using colour alone to portray information	UI components and meaningful graphics (icons)	Usage	comments, suggestions
1	#CDCDCD	#F6F7F9	1.5	N/A	N/A	N/A	N/A	N/A	Fail	P01 - Ellipses linked menu icons in main content	Consider changing the icons to a darker grey, such as #7F7F7F
2	#CDCDCD	#F0F0F0	1.4	N/A	N/A	N/A	N/A	N/A	Fail	P01 - Ellipses linked menu icons and arrow linked icons in main content on hover	Consider changing the icons to a darker grey, such as #7F7F7F
3	#CEE0F4	White #FFFFFF	1.3	N/A	N/A	N/A	N/A	N/A	Fail	P03 - Colour of drop-zones against the background	Consider providing a black outline around the drop-zone
4	#9ECAED	#FAFAFA	1.7	N/A	N/A	N/A	N/A	N/A	Fail	P03, P04 - Keyboard focus around links at the	Consider using a darker blue for the focus, such as #7294B0



Colour Contrast Reference Number	Hex	Hex	Ratio	Text AA 4.5:1	Large Text AA 3:1	Text AAA 7:1	Large Text AAA 4.5:1	Using colour alone to portray information	UI components and meaningful graphics (icons)	Usage	comments, suggestions
										bottom of the main content	
5	#666666	#999999	2	N/A	N/A	N/A	N/A	Fail	N/A	P03, P04 - Change in text colour indicating focus for links at the bottom of the main content.	
6	#999999	#FAFAFA	2.7	Fail	N/A	Fail	N/A	N/A	N/A	P03, P04 - Unselected link text at the bottom of the main content	
7	#CECECE	White #FFFFFF	1.6	N/A	N/A	N/A	N/A	N/A	Fail	P03 - Unselected pagination dots	