

Conversational Assessment Accessibility Conformance Report

WCAG Edition (based on VPAT® Version 2.5)

Name of Product/Version

Conversational Assessment, LTI 1.3 tool, version 2026.10.3 (root package.json). The evaluation ran on 2026.10.2 plus the accessibility fixes listed under [Changes Made During This Evaluation](#); those fixes shipped in 2026.10.3, which production has run since 2026-10-09.

Report Date

2026-10-08

Product Description

Conversational Assessment runs oral-exam-style conversations in the browser. A student answers an interviewer's questions in a chat; a separate grader reads the finished transcript and returns a grade with feedback. Inside Canvas it is an LTI 1.3 tool: students open an assignment and the chat loads in the Canvas frame; instructors choose an assessment through deep linking and see results and transcripts from the same assignment.

Contact Information

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Notes

Scope. Everything that loads inside Canvas, and the instructor pages reached from it:

Page	URL	What it is
Student launch	/lti/<code>	Identity line, assessment title, the chat (apps/web/components/attempt-chat.tsx), grade and feedback when finished
Assessment picker	/lti/<code>	Deep-linking selection: choose an assessment, points, optional title
Connect course	/lti/<code> and /dashboard/lti/connect/<code>	An instructor's first launch in a course, and the window that links it to their account

Page	URL	What it is
Results	/lti/<code>	One row per student with status, grade, score and gradebook status
One attempt	/lti/<code>/attempts/<id>	Transcript, grade, criteria for the assessment's author, resend and delete
Not ready, expired, deleted, launch error	/lti/<code>, /lti/error	The messages a launch can end in
LMS integrations	/dashboard/lti	The instructor's registrations, courses, and setup forms
Admin	/admin/lti, /admin/lti/<id>	Administrator views of registrations (not reached from Canvas; included because they share the tables)

Out of scope: the public marketing pages, the demo, the PrairieLearn element, the authoring tools, and the tutorial videos on /getting-started. The content of an assessment (its title, the questions the interviewer asks, the feedback the grader writes) is authored by the instructor or generated by a language model at run time. The product renders it as plain text with a small Markdown subset (paragraphs, lists, emphasis, code); it does not alter its language or reading level.

Theme. The product has one colour theme. `<html data-theme="light">` is set on every page, so a dark operating-system preference does not change the colours. Contrast was checked under both `prefers-color-scheme` settings and is the same.

Screen readers. No screen reader was run for this report. VoiceOver, NVDA and JAWS were not used. Everything below that depends on how a screen reader announces content was verified only through the accessibility tree and ARIA attributes (Playwright's `accessible-name` and `description` assertions, `axe-core`), and is marked Partially Supports where the announcement itself is the criterion. A run with VoiceOver on macOS and NVDA on Windows inside a real Canvas course is the next step.

Inside Canvas. The automated checks loaded our pages through a real LTI 1.3 launch from a scripted test platform that frames the tool as Canvas does, then measured the page at the top level of the browser at the same URL. Our pages read no cookies, so the content is identical. The pages were not audited inside a live Canvas instance; Canvas's own frame, navigation and accessibility are Instructure's. The Moodle test LMS exercises the same pages functionally in the test suite but not with the accessibility checks.

Evaluation Methods Used

- 1. Automated rules, every page state.** `axe-core` 4.13.0 through `@axe-core/playwright` 4.13.0, Playwright 1.58.2, Chromium 145, with the tags `wcag2a`, `wcag2aa`, `wcag21a`, `wcag21aa` and `wcag22aa`, plus `axe`'s heading and landmark rules (`heading-order`, `page-has-heading-one`, `landmark-one-main`, `region`, `empty-table-header`, `landmark-unique`). Nineteen states, including the chat empty, mid-conversation, after a refused send, and finished with feedback. Final run: zero violations. Raw results are in `axe/`, one JSON file per state, with a README.
- 2. Scripted manual checks** (`tools/e2e/tests/lti-a11y.spec.ts`), for what `axe` does not test:
 - Reflow: horizontal scrolling measured at 320 CSS px and at 640 CSS px (200% zoom of a 1280 px window) on every state. Data tables scroll inside their own container.

- Text spacing: the WCAG 1.4.12 overrides injected on the chat and the results table, then checked for clipped text and horizontal scrolling.
- Keyboard: a whole attempt completed with Tab, Enter, Shift+Enter and typing only. Each Tab stop is checked for a visible focus indicator and its contrast; focus position is checked after each send and at the end; Shift+Tab is checked for traps.
- Live regions: the chat log's role and live-region attributes, that each message is added to the log once and only when final, and that each message begins with its sender.
- Contrast that axe reports as "needs review": sender labels, hints, and form-control borders, computed from the rendered colours.
- Motion: the typing indicators under `prefers-reduced-motion: reduce`.
- The skip link on the www pages.

3. **Code and design review** of the remaining criteria (timing, error handling, consistent navigation, input purpose, language).

The checks run in the repository's test suite (`bun run test:all`, browser stage), so a regression fails the build.

Applicable Standards/Guidelines

Standard/Guideline	Included In Report
Web Content Accessibility Guidelines 2.0	Level A (Yes), Level AA (Yes), Level AAA (No)
Web Content Accessibility Guidelines 2.1	Level A (Yes), Level AA (Yes), Level AAA (No)
Web Content Accessibility Guidelines 2.2	Level A (Yes), Level AA (Yes), Level AAA (No)

Section 508 (as revised in 2017) and the Illinois Information Technology Accessibility Act (IITAA 2.1) incorporate WCAG 2.0 and 2.1 Level AA respectively for web content, so the tables below are the substance of both. University of Illinois policy HR-86 applies these standards to university IT.

Terms

- **Supports:** the functionality of the product has at least one method that meets the criterion without known defects or meets with equivalent facilitation.
- **Partially Supports:** some functionality of the product does not meet the criterion.
- **Does Not Support:** the majority of product functionality does not meet the criterion.
- **Not Applicable:** the criterion is not relevant to the product.
- **Not Evaluated:** the product has not been evaluated against the criterion. Used only for WCAG Level AAA.

WCAG 2.x Report

Table 1: Success Criteria, Level A

Criteria	Conformance Level	Remarks and Explanations
1.1.1 Non-text Content (Level A)	Supports	The LTI pages have no informative images. The site logo on www pages has empty alt text beside the visible product name. Decorative status marks are aria-hidden.
1.2.1 Audio-only and Video-only (Prerecorded) (Level A)	Not Applicable	No audio or video in scope.
1.2.2 Captions (Prerecorded) (Level A)	Not Applicable	No audio or video in scope.
1.2.3 Audio Description or Media Alternative (Prerecorded) (Level A)	Not Applicable	No audio or video in scope.
1.3.1 Info and Relationships (Level A)	Supports	One main landmark per page, nav on www pages, one h1 per page and no skipped heading levels (checked by axe on every state). Tables use header cells, including named action columns. Form fields have labels; the picker groups choices in fieldset/legend. The chat is a labelled role="log"; each message starts with its sender ("Interviewer:", "You:") in text. The grade is a labelled region with a heading. Verified through the accessibility tree, not with a screen reader.
1.3.2 Meaningful Sequence (Level A)	Supports	Reading order is DOM order and matches the visual order; the conversation is chronological.
1.3.3 Sensory Characteristics (Level A)	Supports	No instruction depends on shape, colour, size, position or sound. Keyboard instructions name keys.
1.4.1 Use of Color (Level A)	Supports	Statuses ("active", "Needs review", "Sent", "Failed") are words, with colour as a second cue. Links in text are underlined.
1.4.2 Audio Control (Level A)	Not Applicable	No audio.
2.1.1 Keyboard (Level A)	Supports	An attempt was completed start to finish with the keyboard alone in an automated test. Every other page uses native links, buttons and form controls; the inline delete confirmations are buttons. The chat log is focusable so its scrolling is reachable from the keyboard.
2.1.2 No Keyboard Trap (Level A)	Supports	Tested: Tab leaves the answer box and the grade, and Shift+Tab walks back. Enter sends and Shift+Enter adds a line, so Tab is never captured.
2.1.4 Character Key Shortcuts (Level A)	Not Applicable	No single-character shortcuts.

Criteria	Conformance Level	Remarks and Explanations
2.2.1 Timing Adjustable (Level A)	Partially Supports	A conversation has no time limit, and an open chat keeps working however long it stays open. The launch link behind a page expires 4 hours after launch (configurable, CA_LTI_LAUNCH_TTL_HOURS), with no warning. After that, reloading the page, or an instructor's pick, resend or delete on an open page, shows "This link has expired. Reopen the activity from your course." Reopening from Canvas resumes the same attempt, and nothing a student wrote is lost; an instructor's unsaved picker entries are.
2.2.2 Pause, Stop, Hide (Level A)	Supports	The only motion is the blinking "..." and cursor shown while the interviewer is replying. It stops when the reply arrives, the answer box cannot send during it, and it is the progress indicator for that wait, which WCAG treats as essential. It does not move at all under prefers-reduced-motion: reduce (tested).
2.3.1 Three Flashes or Below Threshold (Level A)	Supports	The indicator blinks once per second; nothing flashes.
2.4.1 Bypass Blocks (Level A)	Supports	Pages framed by Canvas have no repeated navigation. www pages start with a "Skip to content" link that is visible on focus (tested), plus headings and a nav landmark.
2.4.2 Page Titled (Level A)	Supports	Each state has its own title, such as "Accumulator Loops Conversational Assessment", "Choose an Assessment", "Results: ", "Attempt by ", "Attempt Not Available". Checked on every state.
2.4.3 Focus Order (Level A)	Supports	Focus follows reading order. After sending, focus stays in, or returns to, the answer box (also when Send was pressed from the keyboard). When the conversation ends, focus moves to the grade. Tested.
2.4.4 Link Purpose (In Context) (Level A)	Supports	Link text says where it goes. Each "View" link in the results table is in the row that names the student.
2.5.1 Pointer Gestures (Level A)	Not Applicable	No multipoint or path-based gestures.
2.5.2 Pointer Cancellation (Level A)	Supports	Native buttons and links, which act on release.
2.5.3 Label in Name (Level A)	Supports	Accessible names contain the visible text ("Send", "Points", "Title", "Connect your account"). The answer box is named "Your answer", and its visible instruction below it is its description.
2.5.4 Motion Actuation (Level A)	Not Applicable	No motion input.
3.1.1 Language of Page (Level A)	Supports	<html lang="en"> on every page.
3.2.1 On Focus (Level A)	Supports	Focus never submits, navigates or opens anything.
3.2.2 On Input (Level A)	Supports	Choosing an assessment or typing changes nothing until the person submits. The connect page reloads itself once the instructor finishes connecting in the window it opened, which is the outcome they asked for; the window says it will.

Criteria	Conformance Level	Remarks and Explanations
3.2.6 Consistent Help (Level A, 2.2)	Supports	The LTI pages offer one form of help, the instruction to reopen the activity from the course, always in the message itself. www pages keep the same topbar on every page.
3.3.1 Error Identification (Level A)	Supports	A refused or failed send says so in text ("Your message was not sent...", or the server's reason) in an alert region, and keeps the draft. Picker and launch errors are text notices. Required fields use native validation.
3.3.2 Labels or Instructions (Level A)	Supports	Every field has a visible label, except the answer box, whose visible instruction ("Enter sends your answer. Shift+Enter starts a new line.") sits under it and is its accessible description.
3.3.7 Redundant Entry (Level A, 2.2)	Supports	Nothing asks for the same information twice. A failed send keeps the answer in the box.
4.1.1 Parsing (Level A)	Supports	Obsolete and always satisfied in WCAG 2.2. For 2.0 and 2.1: markup is generated by React, and axe finds no duplicate-ID or ARIA structure errors.
4.1.2 Name, Role, Value (Level A)	Supports	Native controls throughout; custom parts are labelled regions (role="log", the grade region) with names checked by test. The "Send" button's disabled state is native. Verified through the accessibility tree, not with a screen reader.

Table 2: Success Criteria, Level AA

Criteria	Conformance Level	Remarks and Explanations
1.2.4 Captions (Live) (Level AA)	Not Applicable	No live media.
1.2.5 Audio Description (Prerecorded) (Level AA)	Not Applicable	No video.
1.3.4 Orientation (Level AA)	Supports	No orientation lock; layouts reflow.
1.3.5 Identify Input Purpose (Level AA)	Not Applicable	No field in scope collects information about the user (names come from the LMS).
1.4.3 Contrast (Minimum) (Level AA)	Supports	axe passes on every state. Text axe could not resolve was computed: sender labels 5.4:1 on white and 4.7:1 on the student's tinted bubble; hints and muted text at least 4.5:1; status colours 4.9:1 to 6.5:1.
1.4.4 Resize Text (Level AA)	Supports	Measured at 640 CSS px, the layout width of 200% zoom in a 1280 px window: no loss of content or horizontal scrolling. Browser zoom itself was not driven; the CSS width is what zoom changes.
1.4.5 Images of Text (Level AA)	Supports	No images of text.
1.4.10 Reflow (Level AA)	Supports	No horizontal scrolling at 320 CSS px on any tested state. Tables (results, registrations) scroll within their own container, which the criterion allows. Long code lines and unbroken words in replies wrap (tested).

Criteria	Conformance Level	Remarks and Explanations
1.4.11 Non-text Contrast (Level AA)	Supports	Text box, number box and radio-button borders are 3.7:1 against their background (tested). The focus indicator is a solid orange ring, 3.9:1 on white and 3.8:1 on the dark buttons (tested at each Tab stop). Disabled controls are exempt.
1.4.12 Text Spacing (Level AA)	Supports	Tested with the criterion's spacing overrides on the chat and the results table: nothing clipped, no horizontal scrolling.
1.4.13 Content on Hover or Focus (Level AA)	Supports	The only hover content is the browser's own title tooltip on a gradebook status, which the browser controls.
2.4.5 Multiple Ways (Level AA)	Supports	LTI pages are steps reached from the course, which is the exception. www pages have the topbar and links between the dashboard pages.
2.4.6 Headings and Labels (Level AA)	Supports	Headings and labels describe their content and purpose.
2.4.7 Focus Visible (Level AA)	Supports	Every Tab stop on the way to the answer box, the Send button, the chat log and the grade show a visible indicator (tested).
2.4.11 Focus Not Obscured (Minimum) (Level AA, 2.2)	Supports	No sticky headers, banners or overlays on our pages.
2.5.7 Dragging Movements (Level AA, 2.2)	Not Applicable	Nothing is dragged. (The answer box's resize handle is the browser's, and optional.)
2.5.8 Target Size (Minimum) (Level AA, 2.2)	Supports	axe's target-size rule passes on every state.
3.1.2 Language of Parts (Level AA)	Supports	The interface is English. Assessment content written in another language by an instructor, or a reply in another language, would not be marked with its language; the product has no way to know it.
3.2.3 Consistent Navigation (Level AA)	Supports	The topbar is the same on every www page; LTI pages have none.
3.2.4 Consistent Identification (Level AA)	Supports	The same functions have the same names throughout ("Send", "Resend grade", "Delete attempt").
3.3.3 Error Suggestion (Level AA)	Supports	Messages say what to do next: try again, reload, or reopen the activity from the course.
3.3.4 Error Prevention (Legal, Financial, Data) (Level AA)	Partially Supports	Each answer is a test response, and Enter sends it at once with no review step and no way to withdraw it. A student can correct or expand an answer in the next turn, and the grader reads the whole conversation, but an accidental Enter sends a partial answer that stays in the transcript. Instructor actions that delete data (an attempt, a course's data, a registration) require an on-page confirmation.

Criteria	Conformance Level	Remarks and Explanations
3.3.8 Accessible Authentication (Minimum) (Level AA, 2.2)	Supports	Students do not sign in to the tool; the LMS launch identifies them. Instructors sign in with Illinois single sign-on or an emailed link; neither involves a cognitive function test.
4.1.3 Status Messages (Level AA)	Partially Supports	Implemented and verified in the accessibility tree: progress ("Sending...", "The interviewer is replying...") is in a role="status" region, errors in a role="alert" region, both present before their text changes; the conversation is a polite role="log" that announces additions only, and in-progress bubbles are hidden from assistive technology so each message is added once, whole. Not verified with a screen reader, which is what this criterion is about.

Table 3: Success Criteria, Level AAA

Not Evaluated.

Changes Made During This Evaluation

Found by axe or the scripted checks, fixed, and covered by the tests above.

Issue	Criterion	Fix
The chat log scrolled but could not take focus once the answer box was gone	2.1.1	The log is a tab stop with a visible focus outline
The reply streamed into the live region word by word, and the student's own message was announced twice	4.1.3	Live log announces additions only; optimistic and streaming bubbles are aria-hidden until final
The error region was created together with its text, which screen readers often miss	4.1.3	Separate status and alert regions, always present
Messages read as "Interviewer What is..." with no break	1.3.1	A colon after the sender, for screen readers
Focus fell to the top of the page when the conversation ended, or after Send was pressed from the keyboard	2.4.3	Focus moves to the grade, or back to the answer box
Instructions for the answer box were only in its placeholder	3.3.2	Visible instruction under the box, tied as its description
Grade feedback headings jumped from h1 to h4; the grade had no heading	1.3.1	A heading for the grade, and h3 for portions
Table action columns had empty headers	1.3.1	Named headers ("Actions", "Settings"), visually hidden
Every LTI page had the same title; error states had no heading	2.4.2, 1.3.1	A title and an h1 for each state
Client IDs on /dashboard/lti and /admin/lti were squeezed into a column a few characters wide	1.4.10	Client IDs stay on one line; long deployment IDs wrap

Issue	Criterion	Fix
Visually hidden table headers escaped their scroll container and widened the page	1.4.10	Table scroll containers are positioned
Long code lines in replies scrolled sideways, out of keyboard reach	1.4.10, 2.1.1	Code and long words wrap
Form-control borders were 1.5:1	1.4.11	3.7:1
The focus ring was translucent light blue, 1.8:1	1.4.11	Solid orange, 3.9:1
No way to skip the topbar on www pages	2.4.1	"Skip to content" link
The picker's title help was a placeholder, cut off at phone width	1.4.10, 3.3.2	Visible help text, tied to the field
A deleted attempt's old link showed a generic failure	3.3.3	"This attempt has been deleted or has expired. Reopen the activity from your course to start again."

Legal Disclaimer

This report describes the product as evaluated on the date above, by the method described. It is the author's good-faith assessment, not a third-party audit.