

HAX: Headless Authoring eXperience

The Challenge

Integrations with a variety of tools on the internet are hard. Beyond just API integrations, there's a distributed user experience to consider. We as a learning technology community have tried to solve this via LTI and iframing content into a singular flow. This may provide at least an acceptable solution for learners, but it's far from ideal for learning content authors.

How can we expect people to build interactive, engaging and quality looking content across a series of applications if there isn't consistency in interfaces to build the content? Many have aligned with design standards like Material Design Library or Bootstrap to at least lessen the cognitive load from building up when it comes to what and where buttons are placed, but we can do even better.

The Solution

The Headless Authoring eXperience (HAX) is an open source library that can easily be integrated into any software solution to provide a consistent authoring experience pattern. Think CKEditor / WYSIWYG software but if it was created with tools for the next generation of the web. Built on W3C the standard called Web Components and leveraging other standards of JSON Schema, we can produce a consistent authoring and integration pattern for our content producers while still leveraging the distributed nature of solutions commonly found in a NGDLE, ecosystem driven approach to online enabled educational experiences.

HAX allows for bringing together distributed tools via leveraging their APIs in order to allow content contributors to search a distributed toolset from one interface. It then provides a series of consistent designed elements which can sustainably be implemented and updated to **guarantee accessibility** and increase the perception of quality of learning experiences.

Learning Impact Outcomes

When we reduce technical and design barriers to the production of advanced learning content, we empower more people to project their work more accurately online. Regardless of how smart someone is, if they can't correctly format and present their ideas the content is lost on learners. HAX helps faculty and instructional designers present themselves faster, with greater accuracy and allowing them to focus on knowledge production rather than moving things around endlessly in HTML and other systems that it references.

Return on Investment

HAX obliterates development times for developers, instructors and instructional designers utilizing it. For developers by simply extending the web via web components you are extending HAX. For all users, HAX eliminates the need to know HTML in order to leverage its portability.