

Making Video Accessible

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One platform that works the way you do.










Turns passive video into active learning.

- Only video platform to support student interactivity during class, for classroom and remote learners alike
- Instructors can adjust teaching as needed based on student confusion indicator
- Flexible polling options support real-time assessment
- Personal study guide allows students to relive learning experiences on demand

The screenshot displays the Echo360 interface. At the top, a dark navigation bar contains icons for a document, chat, a plus sign, a bookmark, a flag, and a speaker. Below this, a video player shows a document with text about atmospheric pressure. A yellow highlight is placed over the timestamp '5:19 / 7'. A search bar at the bottom left contains the text 'Search across all content' and a magnifying glass icon. A white question overlay is positioned on the right, asking 'Where is the condensation funnel?' and featuring a photograph of a large, dark storm cloud with a funnel extending to the ground. Above the question, a smaller white box shows a timestamp '1/2/2014 1:08pm' and the question 'What kind of storm systems form tornadoes?' with three thumbs-up and three comment icons.

Goes beyond basic video statistics, providing unique learning insights to improve student success. 

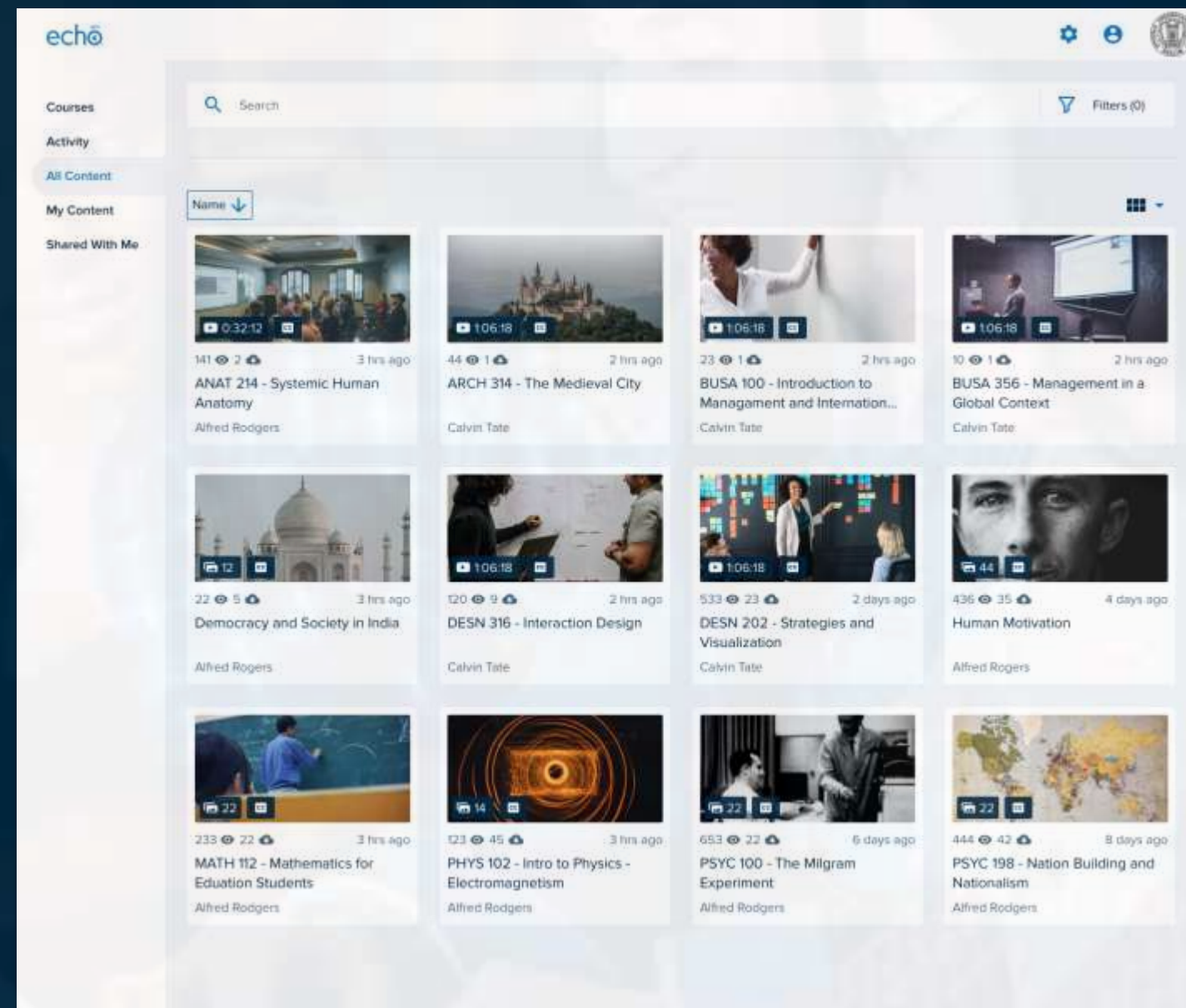
Name	Engagement	Attended?	Video views	Pres. views	Questions	Activity part. / correct	Notes (word count)
 Emily Hunter	20%	42%	3	7	0	33% / 50%	0
 Stacy Van Dusen	44%	68%	45	39	4	89% / 95%	
 Roger Michaels	48%	77%	43	32	3	67% / 100%	
 Chris Rodriguez	54%	81%	54	14	5	74% / 68%	
 Mano Gerard							
 Steve Lee							
 Jennifer Gardner							

- Track student learning behaviors correlated with success in each class
- Easily see your most and least engaged students
- Help struggling students before it's too late
- Identify content that students find confusing



Comprehensive video management without complexity.

- Automatically organizes your videos for easy browsing
- Search, filter, or sort to easily find what you need
- Share videos with individuals, groups, classes, and the public
- Easy access to video analytics
- All from within your LMS



Ensuring Accessibility at Echo360

Areas of Remediation

1. Perceivable

- Information and user interface components must be presentable to users in ways they can perceive

2. Operable

- User interface components and navigation must be operable

3. Understandable

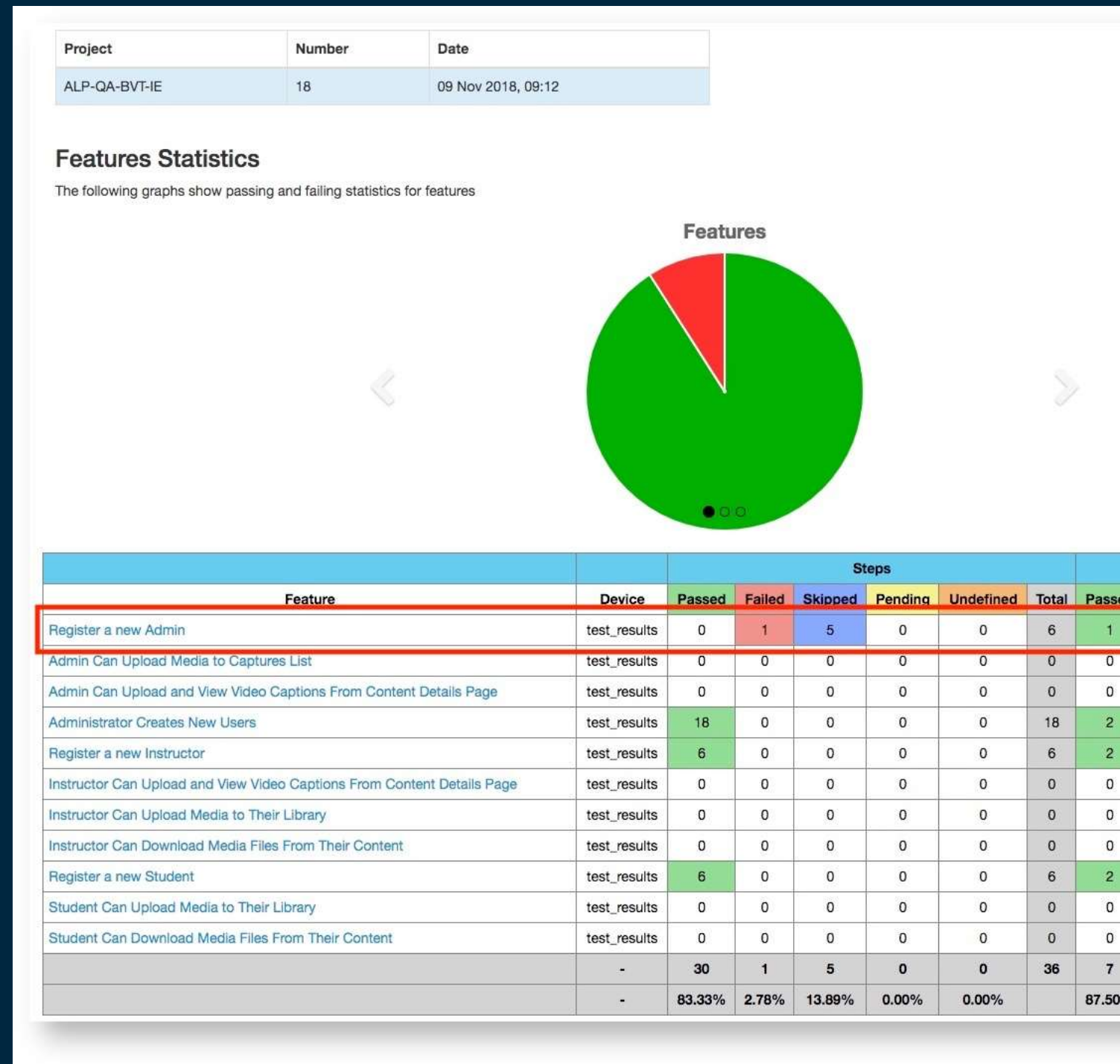
- Information and the operation of user interface must be understandable

4. Robust

- Content must be robust enough that it can be interpreted by a wide range of user agents, including assistive technologies

What we're doing today

- Fully automated testing
 - Axe Accessibility engine integrates open source JavaScript with other Cucumber/Ruby based frameworks we use for other tests
- Support and use a UI Component Library
- All new features and feature sets are tested for 2.1 compliance



Accessibility Remediation – Level Access

- Partnering with Level Access
- Founded in 1997 by engineers with disabilities pre-WCAG, longer than any other US-based vendor
- Supported remediation and continued auditing of more than 1000 companies
 - All testing and remediation suggestions performed by employees with disabilities
- Leaders include Tim Springer (CEO and Co-Founder) and Jonathan Avila (CAO)



Tim Springer



Jonathan Avila

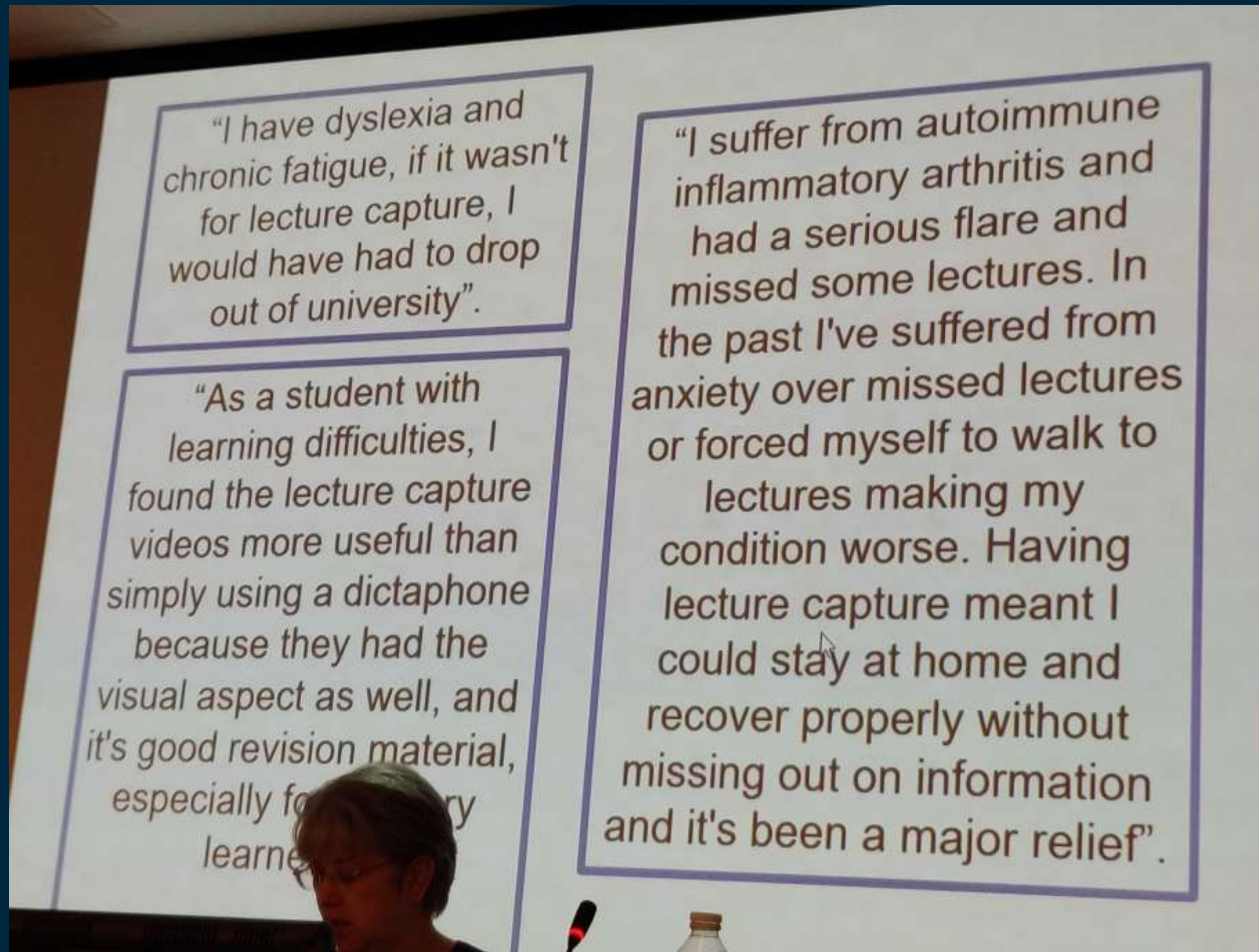
Accessibility Remediation

- Completing global audit
- Updates are live in UC, Groups, Video Editor, and Transcript Editor
- Changes underway for Classroom and Class List (Section) views

The screenshot shows a course page for 'Northern European Forests' in the 'GEO 204 - Intro to Geography' course. The page features a video player at the top with a forest scene. Below the video are navigation tabs for 'About', 'Chapters', 'Transcript', 'Notes', and 'Class List'. The 'About' tab is active, displaying the course title, instructor (David Kershaw), teaching assistant (Brienne Davidson), and upload date (July 15, 2018). A 'Class Description' section follows, describing a timelapse journey through the Dolomites. To the right of the video player is a 'Discussion' section with 8 responses, including comments from Amy Baker, Paul Rodriguez, Jayden Riley, Stephen Coleman, and David Kershaw.

What tools can you use to help make your content accessible?

Strengths of Lecture Capture

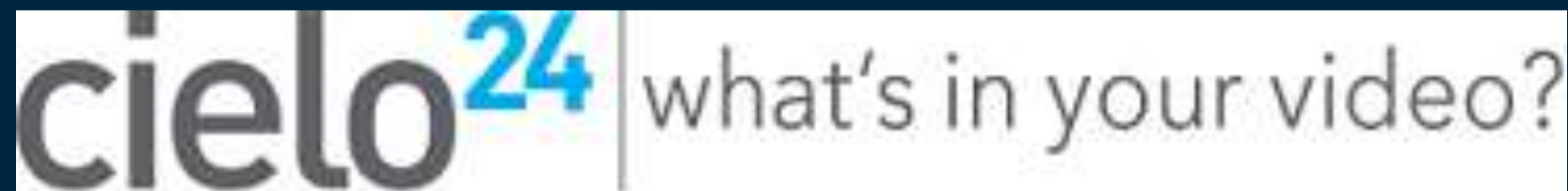


Transcription & Closed Captioning for Accessibility



- **Transcription is a significant improvement in the accessibility of video**
 - Not all accessibility is about sensory impairment
 - Provides learners other modes of viewing content
 - We know the accuracy is not enough for closed captioning
 - (Transcripts != Closed Captioning)
- **Closed Captioning is still the primary focus of video accessibility**
 - Needs to be 99% accurate and include key descriptions
 - A compliant in-house captioning initiative needs to have accountability

Closed Captioning Partners



Transcripts vs. Captions in the Echo360 Classroom



- Different standards for accuracy of transcripts vs. captions
- Can be used for different purposes

The screenshot displays the Echo360 interface. At the top, it shows the course 'WTEST-303 - Scheduled Captures' and the date 'Thu Aug 16'. A search bar contains the text 'Huygens', and below it, it indicates '8 Results'. The video player shows a portrait of Christiaan Huygens. The search results panel on the right contains several text snippets, with the following highlighted:

Huygens was the discoverer of titan, the largest moon of saturn.

The immense size and changing clouds of jupiter entranced him.

Astronomers, as well as navigators, need accurate clocks to time the movement of the heavens.

Huygens was the inventor of many precision timepieces, including the pendulum clock.

To illustrate was some centered universe of copernicus.

He built computers that reproduced the clockwork of the heavens, from mercury to saturn.

The machines he designed.

He signed christian **huygens** inventor.

He was delighted that the copernican

Echo360 and Amazon Transcribe

- **Selected partnership based off testing of multiple other platforms**
 - Google
 - Watson (IBM)
 - 3Play
- **Support appropriate language packs for our four regions (AU, US, UK, CA)**
- **Growing support and testing for multiple languages**
- **Close partnership in steering new features and prioritization of roadmap**

Offline editing of Transcribe files

```

38 9
39 00:00:27.230 --> 00:00:30.710
40 feel free to email me,
41 and I'll do my best
42
43 10
44 00:00:30.710 --> 00:00:33.800
45 to answer those questions
46 in a timely fashion.
47
48 11
49 00:00:33.800 --> 00:00:36.420
50 Also throughout the lecture, of
51 course, you can ask questions.
52
53 12
54 00:00:36.420 --> 00:00:38.586
55 And these questions can be
56 asked after the fact when
57
58 13
59 00:00:38.586 --> 00:00:40.190
60 you watch the recordings.
61
62 14
63 00:00:40.190 --> 00:00:43.340
64 Just alert us as to which
65 slide you're talking about,
66

```

9 results found for 'also' Finding with Options: Case Insensitive

also 9 found Find Find All

Replace in current buffer Replace Replace All

Transcript Editor Demo

Transcript Editor

- Edit transcripts generated from Amazon's Transcribe service or any others via upload
- Transcripts are given an overall confidence score, and low confidence words are automagically flagged
- Version control to revert as needed
- Find & Replace to quickly edit similar errors
- Conflict management to handle competing edits from multiple users
- Push transcripts to the caption track in one click
- Access is controlled by user role (Admin, Instructors, and TAs) and appropriate toggles (Students)

Transcript Editor – Future improvements

- **Student access at the Section and Owned or Shared media**
- **Admin toggle to Transcribe all media (not just published)**
- **One-off transcription requests**
- **Click cues to navigate to moment in media**
- **Highlight and tracking during playback**
- **General clean-up and housekeeping**
- **And more!**

Thank you!

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