

www.accessibilityoz.com @accessibilityoz







Dyslexia

Moderate vision impairment

Severe vision impairment

Epilepsy

Migraines

Physical impairment

Fibromyalgia

Multiple Sclerosis

Crohns Disease

PTSD

Aspergers



Our Services

- Audits
- Mobile testing
- Building web sites
- CMS testing
- Accessible design
- Video accessibility

- User testing
- OS / browser testing
- Consultation
- Accessible documents





Our Products

- OzPlayer
- OzART
- OzWiki

More information: www.accessibilityoz.com





About video

- Video makes up approx 65% of all search results
- Completion of a video with captions doubles compared to without captions
- Videos with transcripts earned 16% more revenue than videos without transcripts
- 80% of people that use captions are **not** Deaf or Hard Of Hearing





Common accessibility issues for video

- Inadequate keyboard access
- Insufficient control and operation
- Incorrect implementation

- Inaccessible content
- Inability to gain a full and complete understanding of all information contained in the video







So how do you create an accessible video experience?

Accessible video

- 1. Accessible content in the video
- 2. Accessible video player
- 3. Never auto-play
- 4. No flashing content
- 5. Accessible transcript
- 6. Accessible captions
- 7. Accessible audio descriptions





Video player testing







Video players tested

- YouTube site
- YouTube embedded
- Vimeo site
- Vimeo embedded
- PayPal
- Floe Project
- AFB

- Able Player
- Acorn
- eStandards
- Kaltura
- Brightcove
- RAMP
- PANAPTO

- MAGpie
- Video.js
- Plyr
- Blackboard
- JWPlayer
- OzPlayer





About the testing

Windows 8.1 (64 bit):

- Firefox: 42.0;
- Internet Explorer 11;
- Google Chrome 46.0.2.

Screen readers:

- JAWS 16;
- NVDA 2015.3;
- Window-Eyes 9.2.1.0;

Mobile:

- Samsung Galaxy Phone, Android 6.0, Chrome: 46.0.2490.76;
- Samsung Galaxy Phone, Android
 6.0, Firefox: 42.0





Accessibility testing

- Audio is not played automatically unless the user is made aware this is happening or a pause or stop button is provided
- Video is keyboard operable (no keyboard trap)
- Video is keyboard accessible
- Video captions are correct
- Video volume can be changed independent on the system volume
- Link to the video is clear





Accessibility testing

- Video has a transcript
- Link to the video transcript is clear
- Video transcript is accessible
- Video transcript or link to the transcript is provided at the video
- Video is available and works well with Flash disabled
- Video has audio description





Screen reader testing

- Player's controls are labelled
- Player's controls are easy to locate
- Button status (on or off) is not accessible or read incorrectly by screen readers
- Next or Previous are easy to find
- Volume level is announced while changing
- Current time of currently played movie is accessible for screen reader



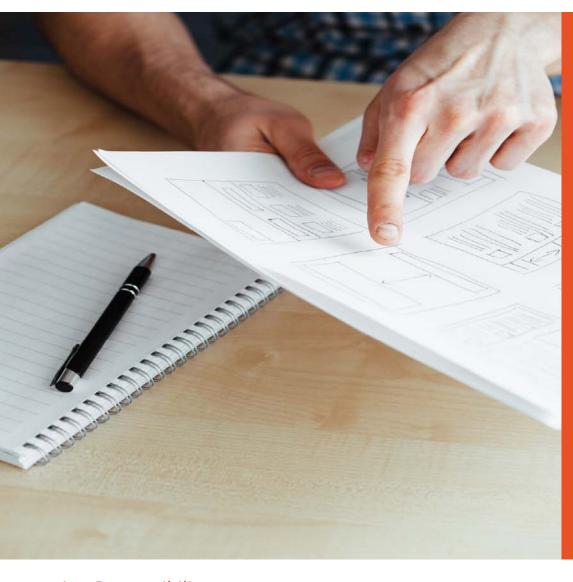


Screen reader testing

- Fast forwarding or rewinding is operable
- The title of currently played movie is easy to check
- Caption or subtitles can be read by a screen reader
- Transcript's text is easy to find







Video player testing results

The worst of the worst

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The worst of the worst: under 50% accessible

30% accessible

JWPlayer

32% accessible:

- YouTube embed
- Vimeo embed

35% accessible:

- Brightcove
- Panapto
- Blackboard

36% accessible:

• YouTube site

39% accessible:

Vimeo site

41% accessible:

RAMP

43% accessible:

Acorn

44% accessible:

• MAGpie



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The average: between 50% and 60% accessible

50% accessible:

PayPal

55% accessible:

- AFB
- Plyr
- Kaltura

57% accessible:

Floe

58% accessible:

• Video.js





Above average: between 60% and 80% accessible

67% accessible:

eStandards

70% accessible:

AblePlayer





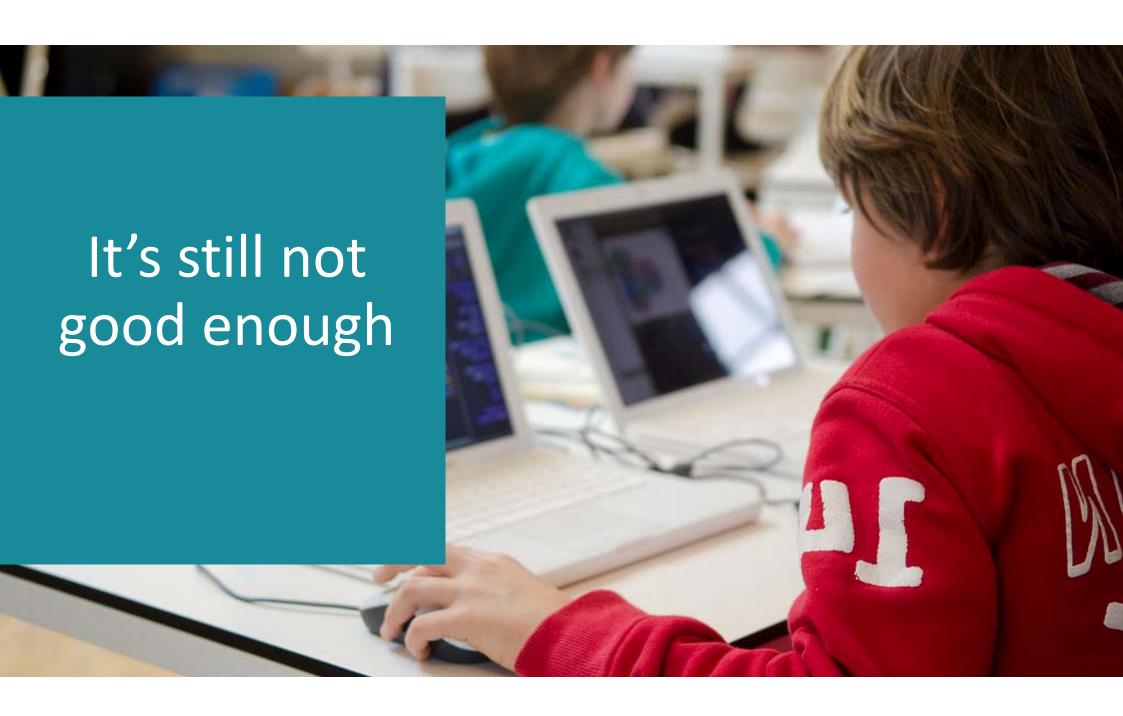
The best: 81%

81% accessible:

OzPlayer









"To enjoy online materials you need to have three browsers, three screen readers and a smartphone with accessibility features, and extreme patience, and still satisfaction is not guaranteed."

Just some of the YouTube embedded errors

- Subscribe button is not keyboard accessible
- Full Screen button is unlabelled and inaccessible to all screen readers
- WindowEyes, IE reads controls as "button" or "Submit, inactive"
- NVDA, Chrome reads both the volume and progress bar as "Slider" only
- Could only play the video no access to any other controls with Android, Talkback





Just some of the Brightcove errors

- Video controls use color alone
- Color contrast is not sufficient
- Video controls do not have a highly visible KFI
- JAWS, IE and FF controls are not read properly
- Full Screen button is unlabelled and inaccessible to all screen readers
- Progress and volume bars are not operable on Android, Talkback





PayPal errors

- Seek bar is not keyboard accessible, but does have buttons that skips (but not in small periods)
- CC button has color contrast issue
- Seek bar uses color to show position
- No button to stop the video on Android, Talkback
- Volume button not accessible on Android, Talkback





Kaltura errors

- JAWS, NVDA, WindowEyes on Firefox, IE and Chrome, labels are read out incorrectly
- Android, Talkback could not find volume controls, unable to use progress bar
- Much difficulty reading aloud captions





Video.js

- Customise options can be focused on with keyboard, but cannot be modified
- Video controls do not have a highly visible KFI
- Video KFO is not in the correct reading sequence
- Going full screen at first seems ok, but when you tab to the end of the buttons, it then continues on behind the full screen and onto the page.
- Video controls could not be used on Android, Talkback





OzPlayer errors

- NVDA doesn't read expanded shortcuts
- Has KFI but the transcript visibility is very poor
- Could not access audio descriptions on Android, Talkback
- Labels for captions and audio descriptions difficult to understand on FireFox, IE and Chrome (JAWS, NVDA, WindowEyes)





What's next?

Testing on iOS

Testing on Mac

Any players missed?



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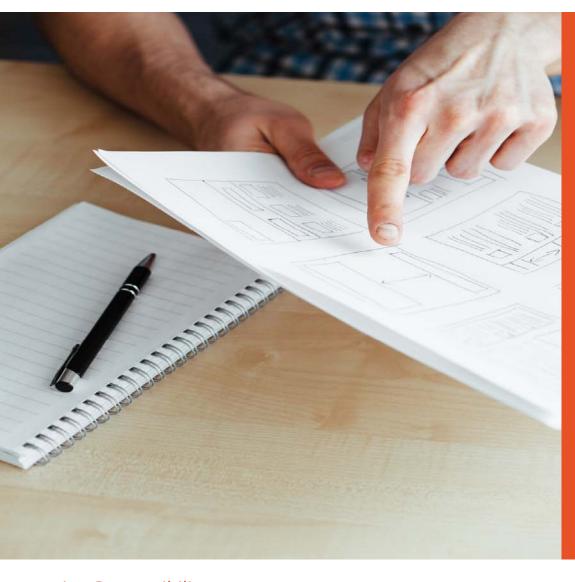
We are happy to share our results

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Questions?

http://a11yoz.com/faf16-video

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