**How to make Captioning Accessible**

The use of video and audio has grown in recent years. With the advent of more user-friendly technology these tools will continue to be a valuable part of an educator's toolbox. Captions and descriptions benefit all students by providing alternative ways to learn course content. Not only do captions support the deaf or hard-of-hearing their use also supports second language learners, students with learning disabilities, and novices learning course material for the first time. Descriptions for videos that have graphics or images that are not explained by the voice over benefit not only those who are blind or have low vision, but also individuals with low bandwidth who cannot access the visuals.

**What is Captioning?**

Captioning is the process of converting audio content into text and then displaying the text on a screen, monitor or other visual display (National Association of the Deaf, n.d.). Captions not only display words that are the textual equivalent of spoken dialogue, but they also include speaker identification, sound effects, and music description.

It is important that the captions be

(1) synchronized and appear at approximately the same time as the audio is delivered;

(2) equivalent and equal in content to that of the audio, including sound effects; and

(3) accessible and readily available to those who need or want them (National Association of the Deaf, n.d.).

**Types of Captioning**

*Automatic Captions*

* Automatic captions are generated by machine learning algorithms, so the quality of these captions may vary. Automatic captions should always be reviewed to ensure that any sections that have been incorrectly transcribed are edited (Ryerson University, n.d.).

*Closed vs Open Captions*

* Open captions are permanently embedded in the video stream and cannot be turned off by the user. Closed captions, which contain the same text as open captions, can be turned on and off by the user (Ryerson University, n.d.).

*Real-time Captioning*

* Real-time captions are prepared and transmitted at the same time as the speaker is talking.

**Why is Captioning Important in a Learning Context?**

Captioning supports the learning of students:

* Who are Deaf or hard-of-hearing
* Who are second language learners
* Who have learning disabilities
* Who are learning discipline specific terminology for the first time (Ryerson University, n.d.).

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| --- | --- |
|  | [**Captions: Improving Access to Postsecondary Education**](https://www.nad.org/resources/technology/captioning-for-access/what-is-captioning/?v=HELHcqKHX_Q)Video from **The DO IT Center** explaining why captioning is important **(07:42)**[https://www.youtube.com/watch?v=HELHcqKHX\_Q](https://support.microsoft.com/en-us/office/add-closed-captions-or-subtitles-to-media-in-powerpoint-df091537-fb22-4507-898f-2358ddc0df18?v=HELHcqKHX_Q) |

**Step-by-Step instructions for Adding and Editing Captions**

Check out our curated resources for different types of applications.

|  |  |  |
| --- | --- | --- |
| **Application** | **Instructions provided** | **Resources on how to caption** |
| YouTube  | * Automatic and “do-it-yourself” captioning and transcripts
* Closed and open captioning
* Editing automatic captions
 |  [Add subtitles and captions](https://support.google.com/docs/answer/9109474?hl=en) - YouTube/Google help 1. [How to caption videos](https://www.ryerson.ca/accessibility/guides-resources/captioning/#how-to) – Ryerson University [Includes editing automatically generated captions]
2. [Adding Captions to YouTube Videos](https://support.microsoft.com/en-us/office/video-live-captions-subtitles-371bd124-855f-46a9-a923-5371c10f36c5) – University of Washington
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| Microsoft Teams | * Automatic live captions
* Automatic captioning and transcripts – saved on MS Stream or OneDrive
 | [Captioning & description](https://support.microsoft.com/en-us/office/use-live-captions-in-a-teams-meeting-4be2d304-f675-4b57-8347-cbd000a21260) – Ryerson University [Live captioning][Record a meeting in Teams](https://support.microsoft.com/en-us/office/record-a-meeting-in-teams-34dfbe7f-b07d-4a27-b4c6-de62f1348c24) - Microsoft Support [Automatic captioning and transcripts][Use live captions in a Teams meeting](https://support.microsoft.com/en-us/office/use-live-captions-in-a-teams-meeting-4be2d304-f675-4b57-8347-cbd000a21260#how-to) - Microsoft Support |
| Zoom | * Automatic live captions
* Record and upload automatic captions to Microsoft Stream
* Editing automatically generated transcripts
 | [Enabling and managing closed captioning and live transcription](https://support.zoom.us/hc/en-us/articles/207279736-Closed-captioning-and-live-transcription) - Zoom Help Center [Video and instructions][Turning on Live Captioning in Zoom](https://www.youtube.com/watch?v=JFY1828wpxc) - CSUN Academic Technology [Video]1. [From Zoom to Stream: How to Upload and Caption Your Recorded Zoom Lecture](https://www.dawsoncollege.qc.ca/faculty-hub/wp-content/uploads/sites/182/From-Zoom-to-Stream-How-to-Upload-and-Caption-Your-Recorded-Zoom-Lecture.pdf) – Dawson College and Adaptech Research Network [PDF]

[Zoom - Live Transcription (Automatic Closed Captioning)](https://oregonstate.teamdynamix.com/TDClient/1935/Portal/KB/ArticleDet?ID=121139) - Oregon State University |
| PowerPoint  | * Automatic live captions
* Captions for embedded media
* Narrated PowerPoint presentation
 | 1. [Add closed captions or subtitles to media in PowerPoint](https://support.microsoft.com/en-us/office/add-closed-captions-or-subtitles-to-media-in-powerpoint-df091537-fb22-4507-898f-2358ddc0df18) – Microsoft support
2. [Present with real-time, live automatic captions or subtitles in PowerPoint](https://support.microsoft.com/en-us/office/present-with-real-time-automatic-captions-or-subtitles-in-powerpoint-68d20e49-aec3-456a-939d-34a79e8ddd5f) – Microsoft support
3. [Live captions & subtitles](https://support.microsoft.com/en-us/office/video-live-captions-subtitles-371bd124-855f-46a9-a923-5371c10f36c5?ui=en-us&rs=en-us&ad=us) – Microsoft support [Video]
4. [How to Create Narrated PowerPoint Presentations (Windows)](https://www.youtube.com/watch?v=qcaHMbKGnRY) – University of Waterloo [Video]
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| Vimeo  | Adding captions or subtitles to video Automatic closed captions* Troubleshooting captions (uploading, playback)
* Supported languages
 | 1. [Captions and subtitles](https://support.google.com/youtube/answer/2734796) - Vimeo Help Center [Videos and instructions]
 |
| Google Slides | Automatic live captions | 1. [Present with closed captions in Google Slides](https://www.ryerson.ca/google/news/2018/11/closed-captions-google-slides/) – Ryerson University [Video and instructions]
2. [Present slides with captions](https://support.google.com/docs/answer/9109474?hl=en) – Google Docs Editor Help
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**References**

National Association of the Deaf. (n.d.). *What is captioning?* [https://www.nad.org/resources/technology/captioning-for-access/what-is-captioning/](https://www.ryerson.ca/accessibility/guides-resources/captioning/)

Ryerson University. (n.d.). [*Captioning and description*](https://www.youtube.com/watch#what-is-captioning). [https://www.ryerson.ca/accessibility/guides-resources/captioning/#what-is-captioning](https://vimeo.zendesk.com/hc/en-us/articles/224968828-Captions-and-subtitles#what-is-captioning)

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**Reference**: Jorgensen, M., Vo, C., Fichten, C., Havel, A., Arcuri, R., Ruffolo, O., & Chiarelli, L. (2021, September 24). How to make captioning accessible. Adaptech Research Network, E-Access Concordia.