

How to get the most from live auto-caption of presentations



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Currently, two software provide live auto-caption of presentations, Google slides and Microsoft Powerpoint within Office 365. For live captioning to work, you need to have a **good** internet connection as both programs use cloud based machine learning for voice to text.

This document describes:

- [how to use each program.](#)
- [best practices](#) for getting good quality captions and,
- [a comparison](#) of the two programs.

This is a living document so please add any suggestions or comments to improve its utility and accuracy.

Firstly, we emphasize that live auto-caption does not satisfy accommodation requests by deaf and hard of hearing for captioning services. Human stenographers present in the room (e.g CART) remains the best solution for quality captioning.

Auto-caption can, in some situations, provide some degree of accommodation for people with moderate hearing loss and captioning can benefit many hearing people including non-native english speakers. **Providing live captioning for your talks can only make your presentations more inclusive than they would be without this functionality.**

In situations with sketchy internet or poor sound input, the quality of the captions will suffer and may end up being almost unusable. For example, at very large conferences that have high wifi demand, the presenting computer may benefit from an ethernet connection, rather than relying on wifi.

1 How to use Google slides and Microsoft Powerpoint live auto-captioning

This document presents three options:

1. [Google slides file,](#)
2. [ppt file presented using google slides software](#) and

3. [ppt file presented in Microsoft Office 365.](#)

Google Slides

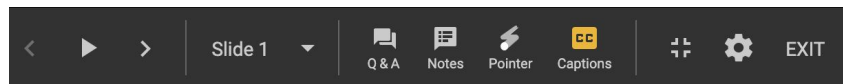
Requirements: Good internet and Google's Chrome browser

Process:

1. You can import powerpoint files into google slides or make one from scratch. Note: importing ppt files often modifies the fonts so leave yourself time to adjust as needed after you've imported the file.
2. When the file is ready to present, click the present button on the upper right



3. A bar will show up near the bottom of the screen, click the CC button



4. Then the captions will start. You can modify the size and location of the captions with the pulldown menu associated with the CC button.

[Here is a video of google slides in action](#)

Want to try this out but don't yet have a google slides file? [Here's a link to a demo file.](#) Go ahead and give it a spin!

Powerpoint file viewed using Google slides

Requirements: good internet and Google's Chrome browser

This is a good option for folks who already have a ppt file but don't have Office 365. It seems that there is a file size limit - it didn't work for a ppt file that had animations and was > 100 MB.

- Drag the ppt to your google drive.
- Using a chrome browser, when you double click the file on the google drive an option pops up at the top to view within google slides. Click that
- Check through slides to see if any formatting needs to be shifted
- Process to start captions is the same as above

Microsoft Office 365 Powerpoint

Requirements: Good internet and access to Office 365

While Microsoft offers a plug-in for captioning with other versions of PowerPoint (not Office 365), the captions are far lower quality than the internet-based version that uses machine learning on the cloud.

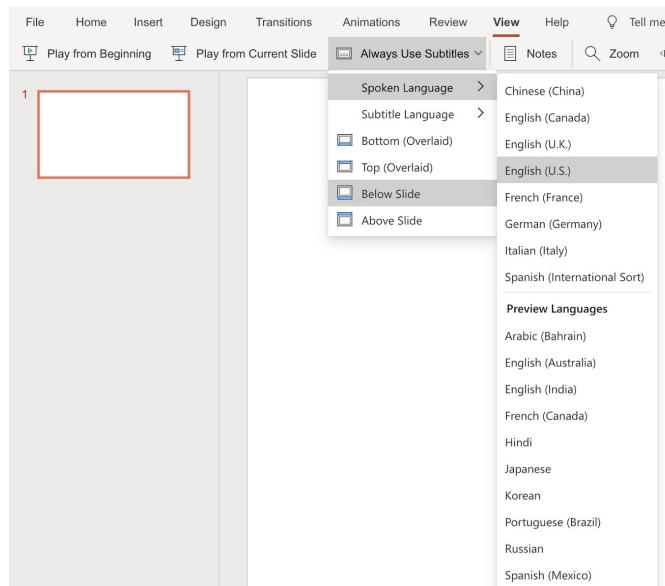
Microsoft has instructions for running captions if you have a web or local version of PowerPoint [here](#).

Overall Process: Your PowerPoint files either need to be on a Microsoft Office 365 drive or you need to have Microsoft Office 365 installed locally.

- If you have PowerPoint for the Web, you can upload files from your desktop to the Office 365 drive or make files from scratch using. Since Office 365 for the Web has limited functions, most folks create the slide show on their desktop and then upload.
- If you have Office 365 installed locally, just open your PowerPoint files as usual.

1. When the file is ready to present, you can find the subtitle options under the Slideshow menu (older versions have under View - shown at right) and you will see a bar that provides the subtitle options.

From this bar you should set the captions to always be on. You can also set the spoken and captioned languages. More appearance settings are available by clicking **Subtitle Settings > System Caption Preferences**.



2. Then the captions will start when you start the presentation. You may need to allow Microsoft to have access to your microphone in order to start captioning.
3. You can turn captions on and off during the presentation via this button



I hear rumors that Microsoft Office can save the caption transcripts but I have yet found that feature. *<please add comments to this living document if you know how to get transcripts!>*

2 Best Practices and Hacks

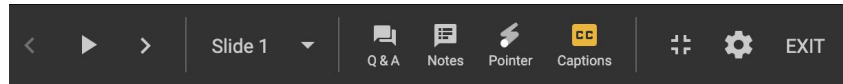
- **Jargon:** Put jargon, place names and other complex words as text on the slide. The caption software will scan the slide for words to match with what you are saying. If the words are embedded in an image (e.g. place names on a rasterized map), the AI can't detect the words so they need to be within a textbox.
- **Sound input quality** greatly impacts the quality of captioning
 - If using the internal microphone of your laptop, set the input volume to maximum. This might be too loud for your next skype meeting but it will greatly improve the captioning of your presentation. This is especially true if you plan to move around during the presentation and not be in front of your laptop the whole time.
 - If you are going to move around, angle your laptop so that the microphone picks up your voice when you aren't directly in front of it.
 - Using an external microphone (hand held or lapel) that routes to the displaying computer will provide the best quality captioning. For example a Lavalier microphone allows you to walk around, which leads to good quality captions no matter where you are in the room.
- **Captioning audience comments/questions**
 - If your microphone doesn't pick up audience questions, please repeat those questions
 - If you are in a setting for the audience to ask questions using a microphone, then have that microphone also transmit to the laptop displaying captions. Traditional microphones connect into a sound system, so for your external microphones to route to the computer you may need to get a USB connector (*Ana will add example*).
 - I've had good results teaching class with a snowball microphone. (*Ana*)
 - My colleagues and I had a blast at a Southern California Earthquake Center meeting using a [catch box microphone](#) - you throw it to the next speaker in the group! (*Michele*)

Auto-Captioning of group meetings

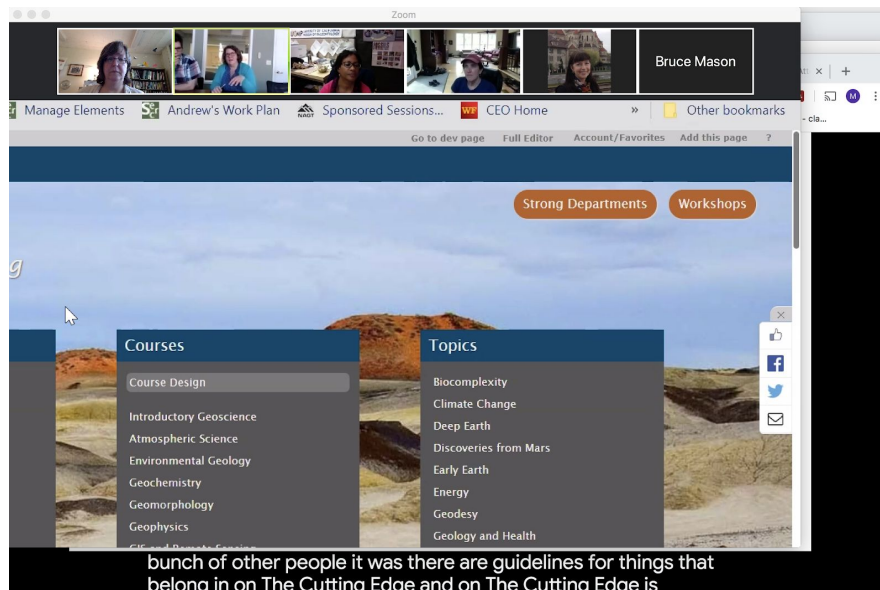
Having captioning running during group meetings offers a way to capture the discussion. If someone misses a comment, they can check the captions. This works best in a room that has several microphones along the table. Note: at this time, the captions only show the last one or two comments.

Auto-Captioning of video conferences and podcasts

One of my (Michele's) favorite hacks is to run google slides with real time captioning in the background of a video conference, skype call or podcast. With this approach I can caption almost anything. To do that I click the icon to the right of the CC icon. This makes the google slides not take the whole screen so I can put another window on top.



Below is a photo of my screen during a zoom meeting where I put the google slides auto caption running behind the zoom window. This was particularly helpful because my colleague wanted to share her screen and in doing so, I was not able to lip read her. In the past people sharing their screens caused me a lot of stress, because with visual cues I really can't follow the conversation. Having the captions helps tremendously.



3 How do the two programs compare?

Microsoft office has punctuation, which can make the message more clear. Google slides doesn't have punctuation but has less lag. I use my residual hearing when I'm reading captioning and so having less lag is my preference.

[Here is a video with google slides and microsoft office 365 running at the same time.](#)

While the microsoft office version has more functionality, it is also a bit more fussy. If you already have your files set in powerpoint then presenting them in Office 365 may work best since you won't lose formatting.

The functionality that microsoft office has for multiple spoken and captioned languages can be very entertaining (my undergrads loved testing this in class). I have not experimented greatly with the quality of the translations, but found spoken English to captioned Spanish to be passably good, with room for improvement. (*Ana*)

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