

# 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.

If you have any suggestions or comments to improve the utility and accuracy of this document, you can make suggestions at [this link to a google doc.](#)

***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 and folks with auditory processing disorder. A [study of UK television viewers](#) found that 80% of caption users are not deaf/HoH. **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. [Cooke et al \(2020\)](#) investigated different conditions and spoken english styles and found that

- good quality microphone,
  - clear and deliberate speech and
  - practicing with the auto-captioning software
- are key for good quality captioning.

# 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

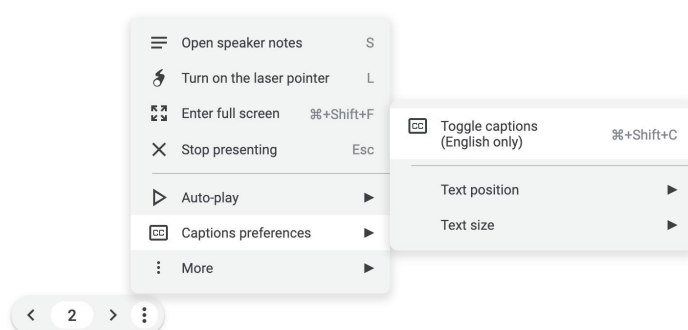
Requirements: Good internet and Google's Chrome browser

Process:

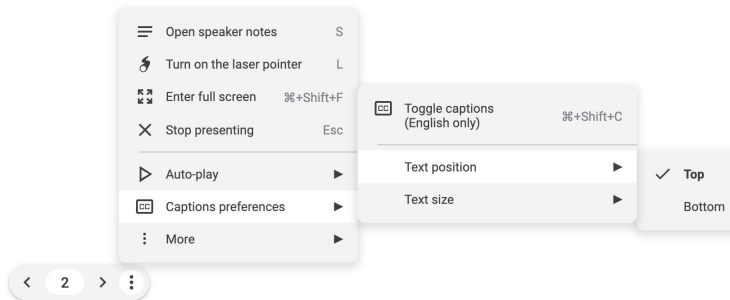
1. You can import powerpoint files into google slides or make one from scratch. Note: importing ppt files often modifies the fonts so leave yourself time to adjust as needed after you've imported the file.
2. When the file is ready to present, click the **Present** button on the upper right



3. Hovering your mouse at the bottom left of the screen will reveal a bar with three dots.
4. Click the three dots and then hover your mouse over '**Caption Preferences**' to reveal a submenu.



5. Clicking '**Toggle captions**' in the submenu turns on CC.
6. To change the location and size of captions choose the other options within the submenu. We recommend captions at the top. For in person presentations this ensures that folks' view of captions are not blocked by heads in front of them.



[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.

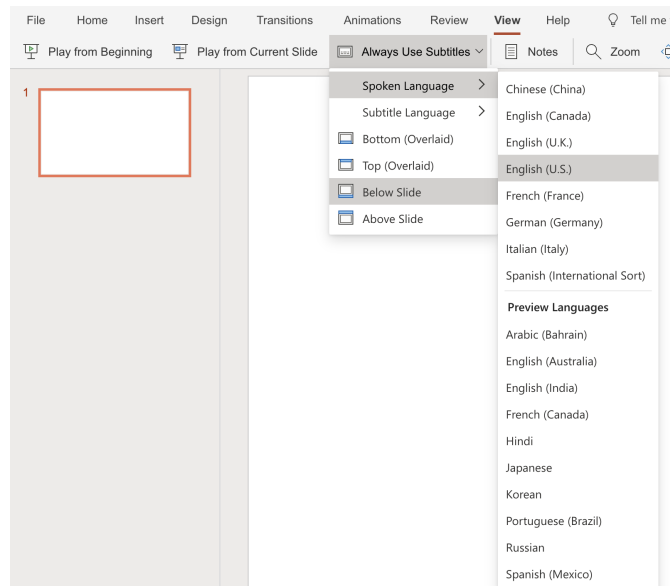
Microsoft has instructions for running captions if you have a web or local version of powerpoint [here](#).

Overall Process: Your powerpoint files either need to be on a Microsoft Office365 drive or you need to have Microsoft Office365 installed locally.

- If you have Power Point for the Web, you can upload files from your desktop to the Office365 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 not yet found that feature. *<please add comments to [the living google document](#) if you know how to get transcripts!>*

## 2 Best Practices and Hacks

[Cooke et al \(2020\)](#) tested auto-caption in a variety of conditions and we highlight here some of their findings.

- **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
  - Using an external microphone (hand held, headset 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.
  - If using the internal microphone of your laptop, set the input volume to maximum. This will greatly improve the captioning of your presentation.
- **Captioning audience comments/questions**
  - Your microphone probably won't pick up in-person 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.
    - 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 in-person 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-caption software like otter.ai can provide full screen transcript but these are not free.

## 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 between the spoken word and the caption. 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 in converting them to google slides. [Cooke et al \(2020\)](#) found that

Powerpoint had slightly better quality captioning than Google Slides but both of these platforms are evolving.

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 some definite room for improvement. (*Ana*)

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