

Teaching Brief

Captioning Social Media Video

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ABSTRACT

Research suggests that the majority of Facebook users typically watch videos with the audio off and often skip over videos that require them to turn on audio, particularly when users are on a mobile device. To counter this tendency, content creators need to caption their social media videos. In many cases, content creators should also be captioning their video because of legal accessibility requirements, particularly if they are producing content for educational institutions or government agencies. In the U.S., these laws might include the Americans with Disabilities Act and Sections 504 and 508 of the Rehabilitation Act. This article offers instructions for preparing captions for videos distributed on social media, including guidance on writing quality captions, using captioning tools, and suggested classroom activities.

KEYWORDS: Accessibility, captions, ethics, public relations education, teaching

Editorial Record: Original draft submitted June 29, 2020. Revision submitted August 9, 2020. Manuscript accepted for publication September 11, 2020. First published online May 2021.

Captioning Social Media Video

Ethics is a critical component of public relations (PR) education and interviews with leading PR professionals suggest there are gaps in the ethical components of PR education (Bortree, 2019). While there is little discussion in the PR education literature about making content accessible to people with disabilities, accessibility fits into the Commission on Public Relations Education's call for incorporating ethics across the curriculum, including the need for students to be knowledgeable in making information accessible, respect for others, and acting in the public interest (Bortree et al., 2019). Accessibility is important to the general public. The presence of website accessibility credentials can positively affect public perceptions of company corporate responsibility (Katerattanakul et al. 2018). There have also been broader calls for incorporating accessibility, including captioning, into the mass communication and PR curricula (Youngblood et al., 2018).

Why Teach Captioning?

Social media (SM) is a critical PR element and PR students need skills in SM tools and practices that help them effectively reach their target audience (Kinsky et al., 2016). Video is an important part of the PR SM toolbox and students should understand how to make video accessible. Captioning, onscreen-text describing a video's audio component (Federal Communication Commission [FCC], 2018), is an important element of that process. Captioning makes sense from an ethical perspective because messaging needs to be inclusive. Almost 8 million Americans are deaf or hard of hearing (DHoH) (Brault, 2012) and captioning allows DHoH audience members to participate in the video culture. In silent films, dialogue appeared as on-screen text, so DHoH only missed music played along with the film. Sound-based movies, introduced in 1927, disenfranchised DHoH and captioned films in the US did not appear until 1951. US television captioning began with WGBH's 1972 captioned

version of Julia Child's *The French Chef*, which relied on open captions—text that is an integral part of the film/video and viewers cannot turn off (Downey, 2008). Broadcasters soon switched to closed captions, captions viewers can turn on and off, a technique that can also be used for SM video.

Captioning SM video prevents disenfranchising DHoH SM users and also makes sense based on how many people use SM video. Around 85% of users consume SM video with the audio muted, (Patel, 2016), and SM platforms, particularly Facebook, stress captioning's importance in meeting audience expectations (Facebook for Business, n.d., 2016). Captioning offers benefits when the audio is not muted as well. Dual-coding theory argues people absorb information better when presented simultaneously in multiple modalities, (Paivio, 1990), and captioned video has broad societal benefits among the non-DHoH population, including promoting language acquisition and increasing literacy. Captioning helps with recall. Students retain information better when they watch videos with captions and, more importantly from a PR perspective, people have better brand recall when watching captioned material (Gernsbacher, 2015). Closed captioning improves search engine optimizations (SEO) as search engines can crawl the caption files. Search engines cannot read open captions (3Play Media, n.d.).

Many organizations fall under online-accessibility mandates, particularly government agencies and schools (Youngblood et al., 2018). Federal laws addressing captioning include:

- Television Decoder Circuitry Act (1990): requiring televisions have closed caption Circuitry;
- Telecommunications Act of 1996: established broadcast caption requirements;
- Sections 504 and 508 of the Rehabilitation Act: required government and education electronic media accessibility;

- Twenty-First Century Communication and Video Accessibility Act (2010): required increased online video captioning.

While the 1990 Americans with Disability Act (ADA) was designed for the brick-and-mortar world, in 2012, federal judge Michael Ponsor extended it to the virtual world in the National Association for the Deaf's captioning lawsuit against Netflix, making it all the more important that PR students understand captioning (Youngblood et al., 2018).

This combination of ethical and legal imperatives, coupled with user preferences, argues that understanding captioning should be an integral part of teaching PR students about SM video. This article provides background material to help set up an introductory lesson in captioning, including captioning best practices, multiple approaches to creating captions, and outlining a captioning assignment and how to assess it. The article assumes students already have a basic understanding of working with timeline-based media.

Captions and Creating Quality Captions

Captioning is not just repeating on-screen dialogue. The Federal Communication Commission (FCC) offers a captioning framework: captions should be accurate, synchronized with the video, complete (all voices and important sounds captioned), and well placed—not obscuring important information (FCC, 2018). If you watch captioned video, you will find that captioning practices vary. For this article, we are drawing on The Described and Captioned Media Program's (n.d.) *Captioning Key*. If only one person is speaking, captioning can be relatively easy—make sure that the captions match exactly what is said, typically including grammatical errors and 'errs' and 'ums.' With the exception of live television captions, most closed-captioned text should be sentence case, with all uppercase indicating someone is speaking loudly. When additional voices are added, captioners may need to add identifiers to clarify who is speaking, putting the name in parentheses and the spoken text on the next

line:

(Fred)

Aunt Linda, how great to hear from you.

Again, conventions vary, as it would not be uncommon to see this caption written on a single line. Important background sounds may need to be captioned, typically setting the sound inside brackets, such as an engine revving up being [engine revving]. Off screen sounds can also be important. If a person looks up when an off-camera door is heard closing, the sound should be captioned [door closes]. Music should be captioned. Examples include [music] and captioning the music's tone [relaxing music]. In the captions shown in Figure 3, the lyrics for the background music were included because they were important to the video's content. The captions identify the artist and the song [*The Newbeats play "Bread and Butter"*] and mark the lyrics with a musical note—♪—at the beginning and end. The key is making sure captions convey all important audio information. Viewers also need to know when there is not any audio for the video [no audio] or unexpected quiet [silence] (Described and Captioned Media Program, n.d.). Captioners need to be careful how they format caption text, and the readability section of Table 1 provides some highlights based on *Captioning Key* (Described and Captioned Media Program, n.d.)—an article that can be used as a reading assignment. Readers interested in a deeper dive into captioning should read *Reading Sounds* (Zdenek, 2015) and *Closed Captioning* (Downey, 2008).

Closed captions work by pairing a video file with a text-based caption file. There are over 30 closed captioning formats (3Play Media, n.d.). U.S. students will most likely use SubRip (.SRT) and the World Wide Web Consortium's Web Video Text Tracks (WebVTT or .VTT) and need to be aware of which format a given SM platform supports. These text files provide media players with caption text and how long to display the captions. The captions below are from an .SRT for a documentary

on the first Apollo moon landing. The number at the beginning of each section identifies the order of the captioning segment. The paired set of numbers on the next line tells the player when to display the caption that follows. These numbers are written in hours: minutes: seconds: milliseconds.

4
00:00:10,500 --> 00:00:12,900
(Houston)
We copy you down Eagle.

5
00:00:13,000 --> 00:00:16,700
(Tranquility Base)
Houston, Tranquility Base here.

6
00:00:16,800 --> 00:00:18,400
The Eagle has landed.

In some cases, the final set of time code digits may indicate a frame number and set off by a semicolon rather than comma. As an example, 00:00:04;18 describes the 18th frame after the four-second mark. Be careful when editing captioning files in a text editor to make sure the correct number of digits are present or the media player may not render the caption correctly. .VTT code is similar, but uses a period rather than comma to separate seconds and milliseconds, e.g., 00:00:47.564 --> 00:00:49.49 and has the option to include formatting and placement information (W3C, 2019). As .VTT and .SRT are text documents, they can be created in a basic text editor such as Notepad. The process is easier with a captioning tool, whether built into the platform like Facebook's or a

stand-alone tool, like Kapwing's.

Bringing captioning into the classroom

This captioning assignment was used in an upper-level video production class that included PR majors. The students responded well to the assignment and reported gaining an appreciation of what captions bring to audience members and the effort it takes to create quality captions. The assignments objectives are 1) to understand the ethical responsibility of making media content accessible, 2) to learn the importance of captioning video content, 3) to understand captioning best practices, and 4) to acquire the skills to use captioning tools. Students should learn to include captions as soon as they begin planning and producing SM video and need to understand which captioning type to use. Facebook and Twitter support closed captioning, while Instagram does not and needs open captions. Captioning is particularly important to integrate into client-based projects where students have the opportunity to serve as captioning advocates, helping educate clients about best practices. When setting up the captioning assignment, students need to understand why captioning is important. In addressing this issue, the instructor should discuss

- Ethical imperatives for inclusive design and meeting the all users' needs;
- Legal requirements for inclusive design and captioning, particularly for government and educational institutions (Sections 504 and 508) and the federal court's 2012 application of ADA to the virtual world;
- Meeting user captioning expectations, particularly for mobile devices;
- Added PR benefits, particularly SEO and increased brand recognition when captions are used alongside audio.

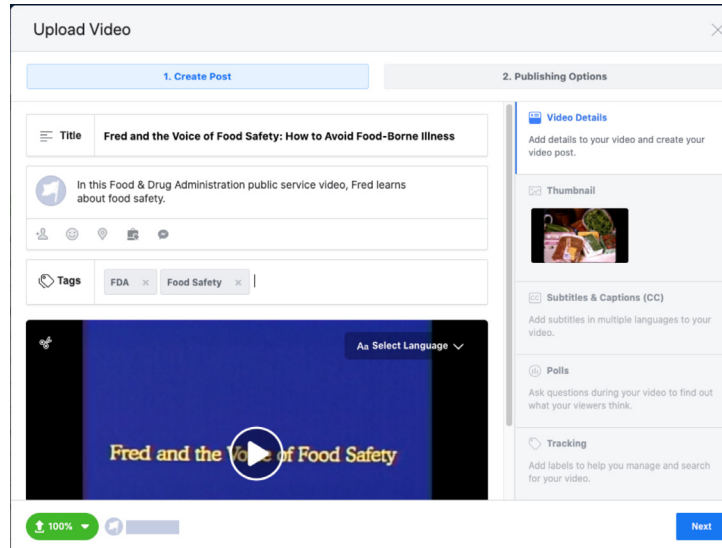
Next, the instructor should discuss captioning best practices (see Table 1), including FCC guidelines, and have students watch a muted

video and discuss what information they are missing without captions. Crisis/emergency communication is particularly suited for this exercise and encourages discussing ethical and legal concerns. The instructor should then introduce a captioning tool and discuss how to use the tool. We provide discussions of Facebook's captioning tool and Kapwing's Subtitler below (see Table 2 for additional tools). Drawing on captioning best practices, the students should caption 30-seconds of video provided by the instructor. The video should have important background sounds and music, as well as off-camera voices. Depending on time, students can begin with auto-generated captions or be given a script. The instructor should stress that copy-and-pasting the scripted lines is not effective caption. Evaluate student captions using the rubric in Table 1. As an alternative, faculty can use this first attempt at captioning as an opportunity for discussion and have students compare their captioning choices, either in small groups or as a class, and discuss their decisions.

Facebook's Captioning Tool

Facebook auto-plays muted videos as users scroll through their feeds (Constine, 2017), and having a text-version of dialogue helps draw user attention. The captioning tool is not available for personal feeds, so students need to choose their distribution methods carefully. This tutorial covers captioning during upload, but the process is similar when captioning existing video and when adding second-language subtitles. To add video content find the "Video" option in the left-hand menu—you may need to click "See more." On the Video page, upload the video by clicking "Upload Video" and locating your video in the file browser. On the left side of the Upload Video page (see Figure 1), add a title, description, appropriate tags, and the video's spoken language. Select "Subtitles & Captions (CC)" on the page's right-hand side to begin captioning and confirm the video's main spoken language. Facebook offers three options: uploading an .SRT, auto-generating captions, and writing

Figure 1. Upload Video Options



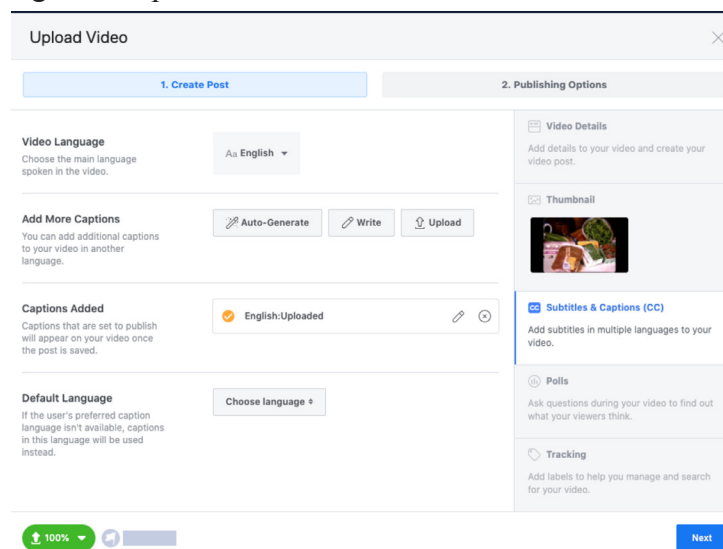
captions. In all three cases, you will probably use the caption editing tool.

You have to use the correct file naming convention when uploading an .SRT: filename.[language code]_[country code].srt. As an example, the filename for *Fred and the voice of food safety* (Food and Drug Administration [FDA], n.d.) might be “fredFoodSafety.en_US.srt,” identifying the SRT as encoded in English as spoken in the U.S. Facebook provides a list of supported language and country codes (Facebook, n.d.). Once you upload the .SRT (see Figure 2), a “Captions Added” box with the text “English:Uploaded” appears with a pencil (edit) and x (delete). Underneath select the default captioning language, which sets a default caption version to show if the user’s preference is not available. You can add additional captions/subtitles in other languages. Watch the video to confirm the captions imported correctly by selecting the pencil (edit). Watch for timing and for encoding problems, such as an apostrophe appearing as â€™™. Use the editor to fix any errors.

You can have Facebook auto-generate captions by clicking

the Auto-Generate button. The “Captions Added” option will show “English:Autogenerated.” The captions will need editing, which you can do by selecting the pencil (edit) option. In addition to fixing mis-transcribed words, add identifiers to show who is speaking and caption important background sounds.

Figure 2. Upload .SRT



The last option is to create captions from scratch by clicking “Write.” This process is easier if you have a script to cut-and-paste text from. When you open the caption editor, it will ask you to select what language the captions are written in. Once you select the language, you will see a list of time markers on the right side of the editor (see Figure 3), including predefined time ranges. The numbers are measured in minutes:seconds:thousandths-of-a-second. You can adjust the numbers by clicking on them, but time spans cannot overlap between clips. To start captioning at the beginning of the video, enter captions in the first time-block, usually starting a half-second into the video. Each time-block represents a single captioning line. As you add lines of text, you will need to adjust the times for each

box accordingly. You can adjust a caption's time on screen in the editor underneath the video, clicking on the beginning or end of the blue captioning box and dragging it to the desired time. You can also drag captions around on the timeline, though at the time of this writing, the drag option does not always work correctly.

If you need to add captions after you upload or edit captions, you will need to open your Video Library to get to the caption editor. To get to the editor, follow the Publishing Tools link in the top page navigation bar and then look for the Video Library link in the left-hand navigation. When you hover over a video title, there will be a pencil icon that will let you edit the video. Select the Subtitles & Captions (CC) button to get to the captioning options.

Facebook does not provide an easy way to retrieve the caption file it creates, making it difficult to reuse captions in other applications. Getting the caption file requires opening up the Facebook video in a web browser, using inspect code to find the caption file, opening the file in the browser, copying the text into a text editor, saving it as a .VTT, and converting the .VTT to an .SRT (Mbugua, 2020). Students planning to distribute captioned material on multiple platforms may want to do their initial captioning outside of Facebook, particularly if the videos are more than a few minutes long.

Figure 3. Entering Captions



Kapwing's Subtiter: A dedicated captioning tool

Not all SM platforms provide a built-in captioning tool. Twitter allows for closed captioning and subtitles but requires you upload an SRT. To add an .SRT, go to your Media Studio library, find the Subtitles tab, select the subtitle language, upload, find your .SRT, and select “update file.” Some SM platforms, such as Instagram, do not support closed captions, meaning you have to create open captions that are an integral part of the video.

Kapwing's online Subtitle Maker (see Figure 4) lets you create both .SRT and open-caption versions of your video. The free version limits you to projects under seven minutes. As with Facebook, you can upload an .SRT, auto-generate captions, or manually enter captions. This example uses auto-generated captions to create an open-captioned video. Once the source video loads, click the green Auto-generate button and select the video language (see Figure 5). After captions are generated, they need to be edited and timed (see Figure 6). You can edit caption text by clicking into it. You can adjust caption timing by moving the white start and stop circles above the caption text. Be careful that captioning timing between sections do not overlap. Under Text Options on the interface's left side, you can adjust font type, size, color, background, and alignment. Video format depends on your target platform and the Video Options menu can help with the decision making (see Figure 7). Changing the video proportions while using the Fit option, may result in a black border below the video. Using this border space is a popular way to create open captions (see Figure 8). To export an open-captioned video, click the red “CREATE >” button, which will create an open-caption .MP4. If you have a paid account, you can also download the .SRT.

Figure 4. Kapwing's Subtitle Maker

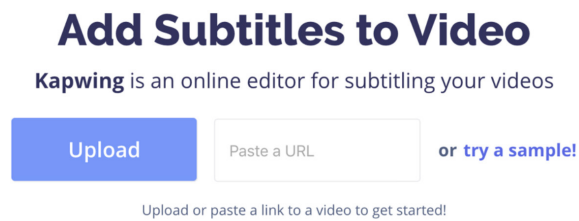


Figure 5. Autogenerating Captions

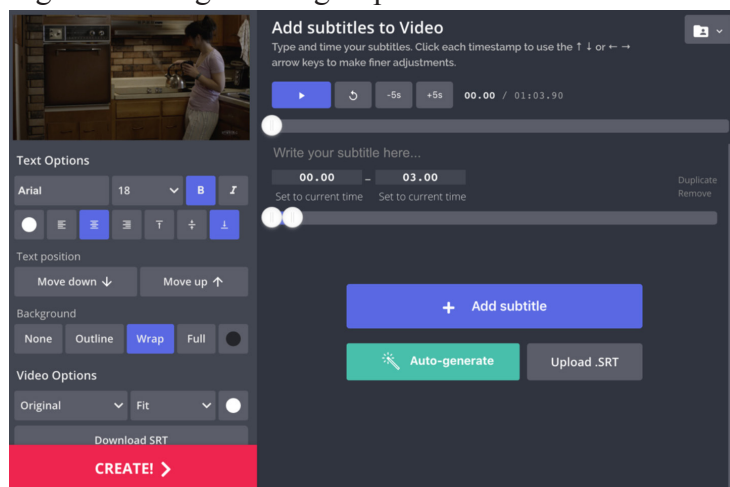


Figure 6. Kapwing's caption editing interface

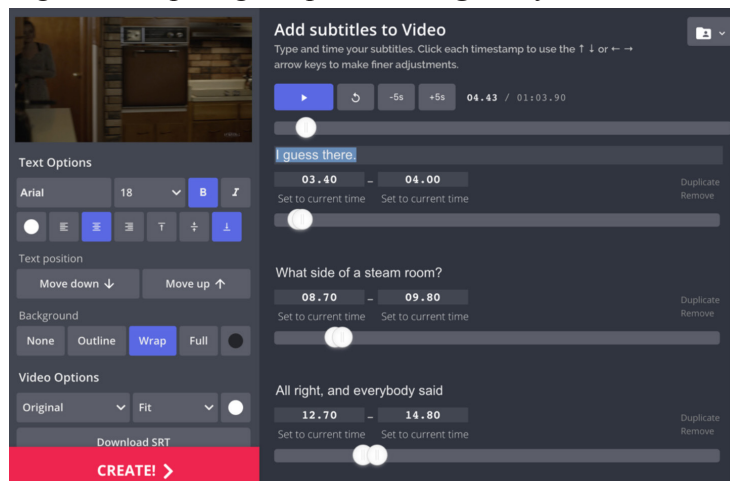


Figure 7. Kapwing's video format options

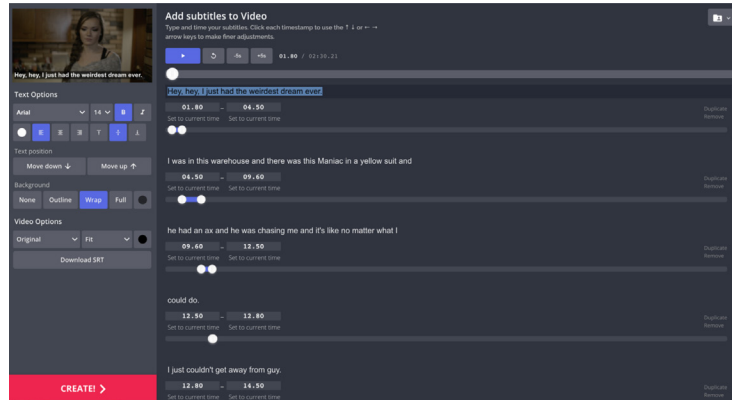
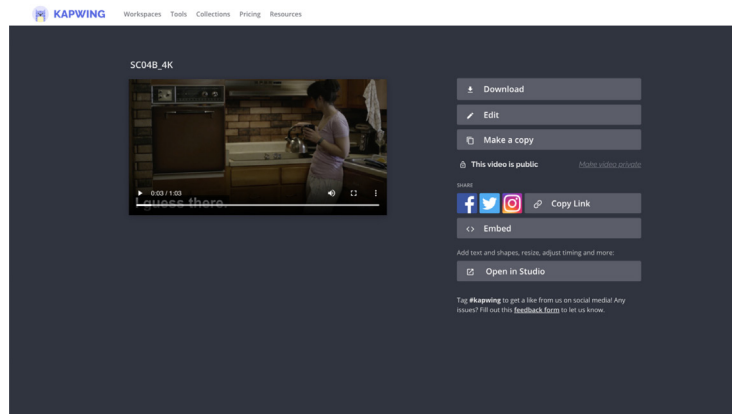


Figure 8. Using border space and publishing



Conclusion

Teaching PR students to create usable captions for SM videos prepares them to meet viewer captioning expectations, meaning their message will more likely reach its audience, particularly on mobile devices. Closed captions improve SEO, making closed captioned videos more findable than non-captioned or open captioned videos. Most importantly, teaching captioning emphasizes ethical best-practices in content accessibility and prepares students to be accessibility advocates.

While this article focuses specifically on captioning SM video, faculty should consider including accessibility more broadly in their teaching—audio podcasting courses might include having students produce transcripts, web design classes should teach students to build accessible websites, and document design courses should include how to create accessible PDFs.

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Table 1. Captioning Best Practices Rubric

Readability* (20 points)

- Use a sans-serif font (one without extenders) such as Arial, rather than a serif font, such as Times New Roman
- Keep full names (e.g., Fred Jones) on one line
- Keep each caption on screen long enough to easily read—typically 1.33 to 6 seconds
- Keep captions to no more than two lines
- Do not break words or separate words and modifiers when changing lines
- Make sure captions and background have enough contrast. Captions are typically white text on a black or dark background

Accuracy (20 points)**

- Caption dialogue, meaningful background sounds, music, and meaningful silence
- Indicate who is speaking when needed
- Do not paraphrase dialogue
- Only caption important background sounds

Synchronous (20 points)**

- Captions should appear on screen when the sound occurs

Completeness (20 points)**

- Captioning starts when the video begins and stops when video ends

Placement (20 points)**

- Captions should not obscure important visual information
- Pay particular attention to onscreen text that is already in the video

*(Described and Captioned Media Program, n.d.). Captioning Key recommends left-aligned captions, but not all captioning editors/media players support this option. User settings may affect captioning format.

** (FCC, 2018)

Table 2. Captioning Tools

Tool	Cost	Pros	Cons
Facebook Pages	Free	Auto-captions. Built into Facebook.	Can be cumbersome to use. Does not export captions. Does not create open captions.
Kapwing (https://kapwing.com)	Free/ Paid	Creates open and closed captions.	Free version is limited to 7-minute videos. Subscription required to download .SRT file.
Subtitle Horse (https://subtitle-horse.com/)	Free	Free. Allows you to download SRT, VTT and other formats. Includes a mobile friendly version of the software.	No auto-captions. Requires registration. Does not create open captions.
YouTube	Free	Auto-captions. Easy to use. Exports .SRT file.	Can take an hour or more to generate auto-captions. Does not create open captions.
