

Creating ADA Compliant Instructional Material for Online Courses

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Executive Summary

This document includes information on designing ADA (Americans for Disabilities Act) compliant content for online courses. It is a work in progress put together by a group of instructional designers at Engineering-LAS Online Learning (ELO). Its primary audience includes instructional designers and instructors interested in teaching online. It is not a comprehensive guide on designing online courses for ADA compliance, nor is it certified by Iowa State University (ISU). However, initial exploration has shown that in order to achieve compliance from all instructors, the institution needs multiple approaches – educating faculty on UDL, providing faculty with Do-It-Yourself ADA tips and resources, and signing up with a captioning service.

Email the ELO Design Team at elodesign@iastate.edu with your suggestions for improvement.

BACKGROUND INFORMATION

This document is a work in progress initiated by a group of instructional designers at Engineering-LAS Learning Online (ELO). The motivation for this work stemmed from the designers' desire to create quality online courses that are pedagogically sound and accessible to a diverse audience.

After extensive research and testing, ELO designers have developed Do-It-Yourself (DIY) tips and techniques for designing ADA compliant instructional materials, like images, documents, and audio/videos. These tips and techniques need to be continually updated.

Additionally, in order to achieve compliancy from all instructors, it is recommended that ISU educates faculty in UDL (Universal Design for Learning) best practices and invests in a commercial captioning service. CELT has developed a [Blackboard course on UDL](#) that faculty can enroll in to learn ways of making their course accessible to a diverse audience. Also available is [AccessDL](#) (The Center on Accessible Distance Learning) funded by the U.S. Dept of Education that provides guidance on making distance learning courses and programs accessible to students and instructors with disabilities. A list of vendors for closed captioning is included in Appendix A.

This document is organized into two sections:

1) Laws Impacting Web Accessibility and 2) Tips for Creating Accessible Media

LAWS IMPACTING WEB ACCESSIBILITY

There are state and federal laws requiring the University to assure online material is accessible to current and prospective students and employees. This document deals with ways to make online courses accessible to all people, regardless of their impairments or situation. Additionally, this document is designed to help assure the University is meeting its legal obligations when it comes to web accessibility. Increasing accessibility while managing legal risk is the twofold goal of this guidance.

At the federal level, the Americans with Disabilities Act (ADA), as amended, is an anti-discrimination statute designed to ensure equal access to opportunities, programs, and benefits for qualified individuals with disabilities in education, employment, and other areas.

At the state level, the Iowa Civil Rights Act (ICRA) prohibits discrimination on the basis of disability in both employment and education. This incorporates the right to access information in education, employment, and other areas.

Common problems with web accessibility create legal risks under both the ADA and the ICRA.

TIPS FOR CREATING ACCESSIBLE MEDIA SECTION INCLUDES:

1. Audio/Video Accessibility
2. Document Accessibility
3. Image Accessibility
4. Website Accessibility

1) Audio/Video Accessibility Tips

Audio and videos need to incorporate features that make them accessible to everyone. Providing transcripts that can be downloaded and/or closed captions with audio and video are two of the main ways of making audio/video accessible to hearing and/or vision impaired users. More and more, closed captioning is becoming a preferred method.

Closed Captioning of Online Audio and Videos: Closed captions, also known as subtitles, provide text equivalents of the spoken part in a video. Closed captions are synchronized with the audio and usually appear at the bottom of the screen. If only audio is available, a transcript is made available for download.

ADA/ICRA compliance tips: The following are some best practices for closed captions:

Content

- Captions should be accurate. They should fully represent the audio, including speaker identification and non-speech information. When a speaker stutters, caption what is said.
- Equal – Meaning and intention of the material is completely preserved.

Language

- Spelling and Capitalization – Be consistent in the spelling of words.
- Punctuation and Grammar – Follow conventional rules of Standard English.
- Hyphens and Dashes
- Nonessential information that needs special emphasis should be conveyed by double hyphens or a single long dash.

Format

- Consistent – Uniformity in style and presentation. Use a font similar to Helvetica medium with clear resolution.
- Text Considerate Case – Mixed case characters are preferred.

Display

- Closed captions should be timed to synchronize with the audio. To check for compliance, select the Captions options drop down > Show non-compliant duration. This option highlights any captions in red whose duration is not between three and seven seconds.
- Only one to three lines of text should appear on the screen all at once, stay there for three to seven seconds, and then replaced by another caption.
- Include not more than 32-characters per line.
- Lines should be broken at logical points where speech normally pauses, unless it exceeds the 32-characters-per-line requirement.
- Readable – Displayed with enough time to be read completely.
- Placed properly and must not interfere with existing important information. Captions should not cover up graphics and other essential visual elements of the picture

Creating Closed Captioning: There are multiple ways for creating closed captions. These include hiring individuals for this purpose, signing up with commercial vendors and/or Do It Yourself (DIY) options.

- You can outsource the whole process and have commercial vendors create the transcript, insert time codes to sync with the audio, and upload to the video server. See a list of vendors in Appendix A.
- Outsource part of the project – either create the transcript and send it to a vendor for creating time codes and then upload the transcript with the time codes to the video server, or
- Do it Yourself (DIY). **See accompanying document “Do It Yourself Guide on Creating Closed Captions”.**

2) Document Accessibility concerns the proper formatting of documents for screen readers. (See more information on Kurweil 3000 screen reader used by ISU Student Disability Office in Appendix A). Always provide documents in an alternative text-based format, such as HTML or RTF (Rich Text Format), in addition to PDF. Text-based formats are the most compatible with assistive technologies.

Resources for creating ADA Compliant PDF, DOC, PPT Files

- The National Center on Disability and Access to Education has developed a one-page accessibility ["cheat-sheet"](#) to assist in creating accessible content.
- ["How to make a Word Document Accessible"](#) by Portland Community College.
- ["MS Word: Headings"](#) video by Portland Community College
- ["Acrobat DC"](#) tools make it easy to create accessible PDFs and let you check the accessibility of existing PDFs.
- Ways to make an accessible PDF on Mac: (Resource WAMOE)
 - Start with a well-structured, accessible word document or presentation.
 - Click the file tab and select save as. In the Save as type field, select PDF.
 - Enter a file name in the File name field.
 - Click on options button and make sure the documents structure tags for accessibility checkbox is checked.
 - Click OK.
 - Click Save. This will tag all of the text formatting so page headings and lists are correctly interpreted by a screen reader.
- Scanning a Document to a PDF: Scanning a document means taking a photo of it. Since a photo of text is not accessible, you will need to run optical character recognition (OCR) on the scan. This will make the text on the scan readable by assistive technologies.
 - *How to run OCR on a PDF using Adobe Acrobat Pro:*
 - Open your PDF file.
 - Open the Tools panel (click "Tools" in top right) and click "Recognize text".
 - Click "In this File" and click the "Edit" button to adjust your OCR settings.
 - Select the "Language" of the text.
 - For the output style, choose "searchable image" for PDF output style and down-sample to 600 dpi.
 - Click Ok when done
- **Fonts** Tips on use of fonts while creating ADA compliant documents:
 - Ensure your text is readable by using at least 10px sans serif fonts, such as Arial, Helvetica or Verdana. These font types will magnify well for those who have low vision.
 - If there is an image with text in it, make sure to put the text in the alternative text [opens in new window], so it will be accessible to blind students.
 - Refrain from using floating text boxes, track changes or commenting, because these features are not accessible.

3) Image Accessibility typically involves adding text description to images that can be read by screen readers, because screen readers typically skip images on a web page. Adding an image that constitutes an important part of the content without its text equivalent puts the student with visual impairment at a disadvantage. Possible solutions include:

- Adding a text equivalent to every image, which will enable a user with a vision disability to understand what it is. The text equivalent can be in the form of:
 - An alt text description, which is detected by screen readers, but is not visible to other users.
 - Captions for images that describe the image
 - A description in the text surrounding the image. See examples of [Alternative Text Descriptions for Images](#)
- Try not to use only images and/or graphics to convey important content. Images and graphics should be used to enhance existing text and not constitute the main content.

4) Website Accessibility tips - see images and audio/video accessibility tips

Use [WAVE](#) to check websites for basic levels of accessibility. WAVE is a free designed Web Accessibility Evaluation Tool.

[“Tips for Using WAVE for ADA Compliance”](#) by Temple University Libraries.

- Adding Alternative Text to an image makes that image accessible to the blind. Successful alternative text description for the image either could be:
 - in the surrounding paragraph text
 - an alt text description,
 - a long description or
 - a caption
- Providing the text format for audio files makes them accessible to those with hearing disability.
- For colorblind users, the visuals can be tested by converting them to grayscale. As long as visual elements have hierarchy, they should be comprehensive for those individuals. Check [“Colour Blind Awareness”](#) website for more information regarding the use of colors in your website.
- Websites should be designed so they can be viewed with the color and font sizes set in users’ web browsers and operating systems.

Provide audio descriptions of images (including changes in setting, gestures, and other details) to make videos accessible to people who are blind or have low vision. Provide text captions synchronized with the video images to make videos and audio tracks accessible to people who are deaf or hard of hearing. (See options for making videos accessible in the next section).

See [US Department of Health and Human Services Guidelines on Creating an ADA-Compliant Website](#).

APPENDIX A

CLOSED CAPTIONING SERVICES

- **Caption Solutions** (877-674-5800) –wanda@captionsolutions.com
- **Automatic Sync Technologies, LLC** (877-AST-SYNC), www.automaticsync.com/caption, info@automaticsync.com
- **RAMP**, www.ramp.com
- **REV**, www.rev.com
- **Cielo24**, <https://cielo24.com/>
- **3PlayMedia**, <http://www.3playmedia.com/>
- **ProTranscript**, <http://protranscript.com/faq.html>

SCREEN READERS

Screen readers are assistive technology that help users with poor vision navigate a website by reading aloud text displayed on the computer screen. Kurzweil 3000 is the screen reader used at Iowa State University. Kurzweil 3000 is an integrated scan and read software program that provides multi-sensory access to reading material with powerful tools for reading, writing, test-taking and learning. Kurzweil 3000-firefly provides four platform options:

1. Windows
2. Mac
3. ipad app
4. Web App accessible via web browser

If you need Kurzweil 3000 software on your computer, you can download and install it from one of these locations:

- [For Macintosh](#)
- [For Windows](#)

You can use firefly to browse through your Universal Library and read Kurzweil or text files directly from a computer's web browser.

Do It Yourself Guide on Creating Closed Captions

Creating closed captioning is a 3-step process.

1. Create an accurate transcript with punctuation
2. Insert time codes to sync with audio
3. Upload to the video server

This document includes instructions on creating closed captions using the following software:

1. YouTube
2. Camtasia
3. Dragon Naturally Speaking
4. Voicethread
5. Built-in Dictation tool in Mac

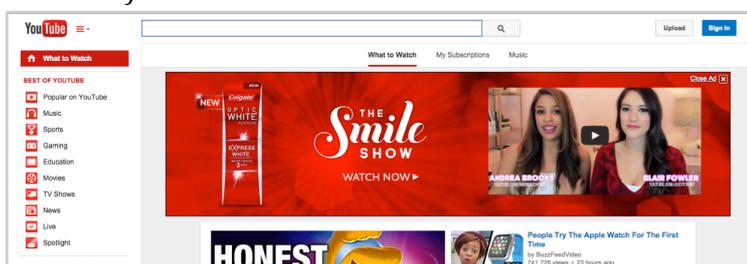
YouTube

YouTube's closed captioning tool can be useful not only for creating captions for use in YouTube, but also to export for use in other applications. Below are instructions for adding closed captions in YouTube and exporting the caption file for use elsewhere.

Part 1: Accessing YouTube

First, you will navigate to YouTube and log in.

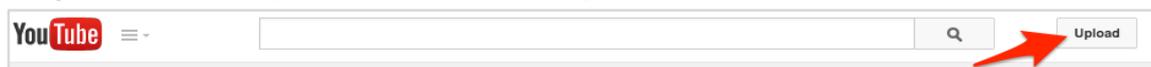
1. Go to [YouTube](https://www.youtube.com) and log in. If you do not have a Google account, you will need to sign up for one. (You will not be able to use your Iowa State CyMail account to post videos to YouTube.)



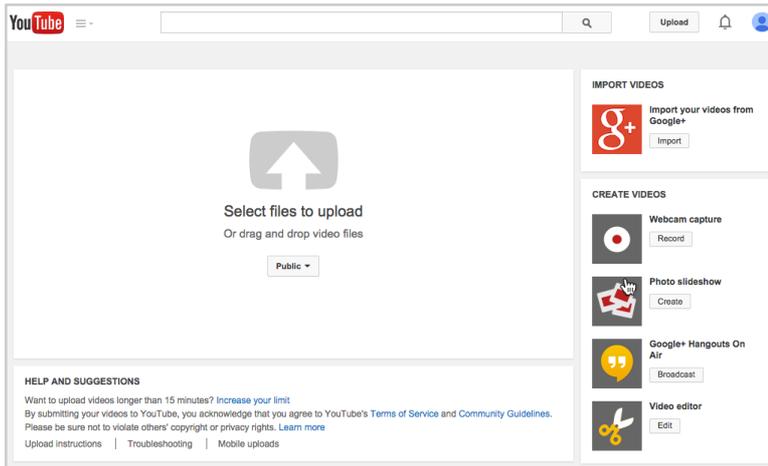
Part 2: Uploading and accessing your video

Once you've logged in to YouTube, you will upload your video and YouTube will process it.

1. Once you are signed in, look at the upper right corner to locate the *Upload* button (see image below). Click *Upload* in order to upload your video.

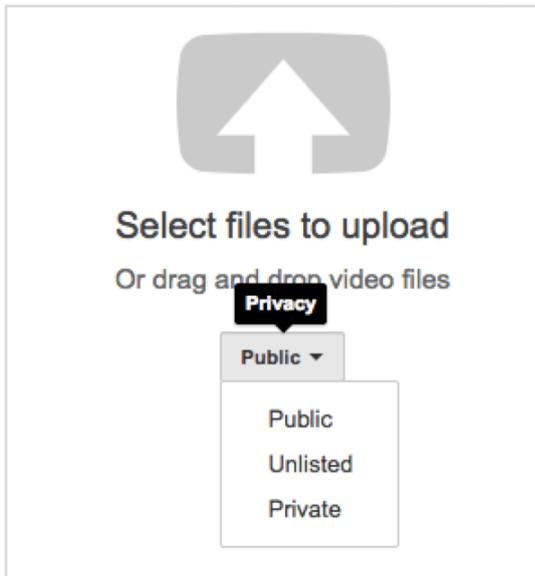


2. Once you click upload, you will be directed to a new page where you can either browse your computer to upload your video and/or you can drag and drop the file that you would like to upload to your browser (see image below).

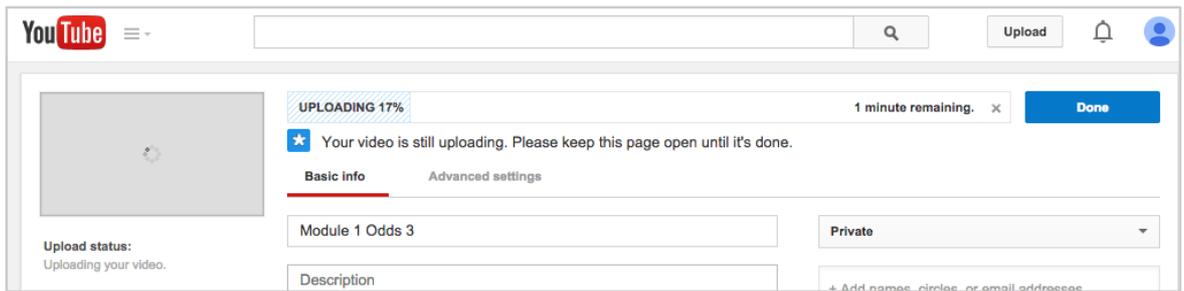


YouTube requires video files, such as MP4s. If you are using Camtasia or any other screen recording tool that produces a video project file (i.e., .camproj or .prproj), you will need to export your screen recording as an MP4 file before uploading it to YouTube.

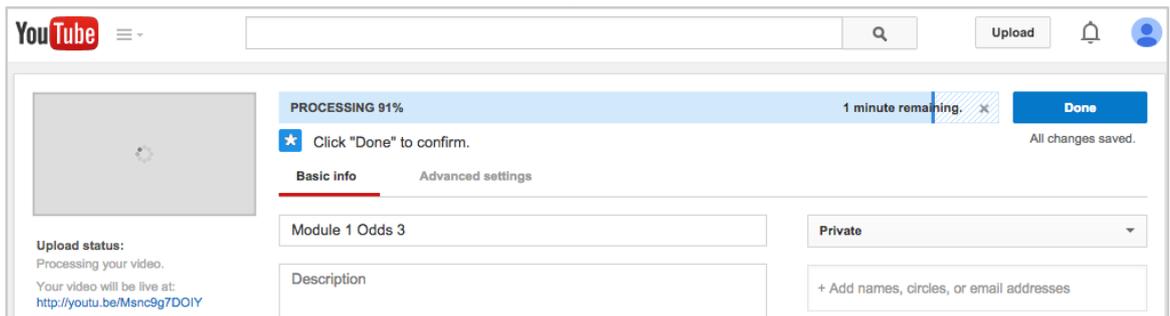
Be sure to set your video's privacy settings according to your own needs and preferences. We recommend either the “Unlisted” or “Private” setting if you do not want the world to view your videos (see image below).



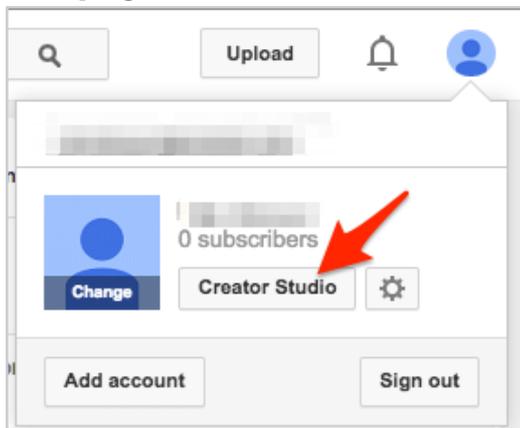
3. Once you've selected a video file to upload, it will take some time for YouTube to upload and process your video file (see image below). How long this process takes depends on the Internet connection speed that you are using and the length of your video. **Stay on the upload page until the video has finished uploading or the upload will stop.**



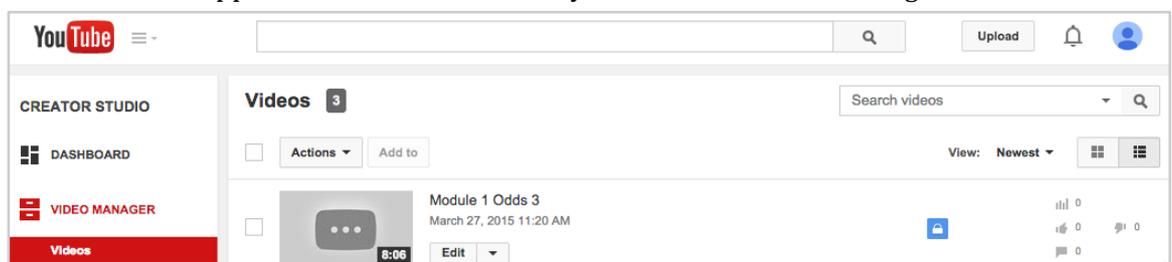
- Once the upload stage is complete and the processing stage has started, it is safe to close your browser window. YouTube will process your video on its servers.



- You can access your video through the Creator Studio, available through the user icon in the top right.



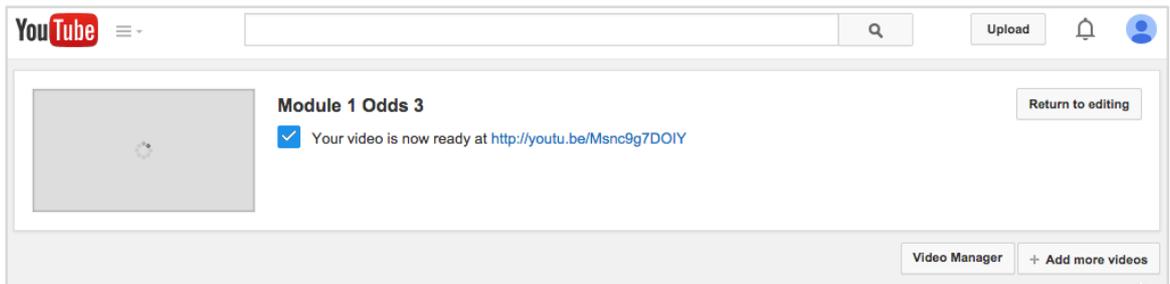
Your video will appear in the list of videos in your YouTube Video Manager.



Once processing is complete, the video image will be replaced with an image from the video.

You can also access your video by clicking the "Done" button next to the status indicator when processing has been completed. This will take you to the summary screen shown

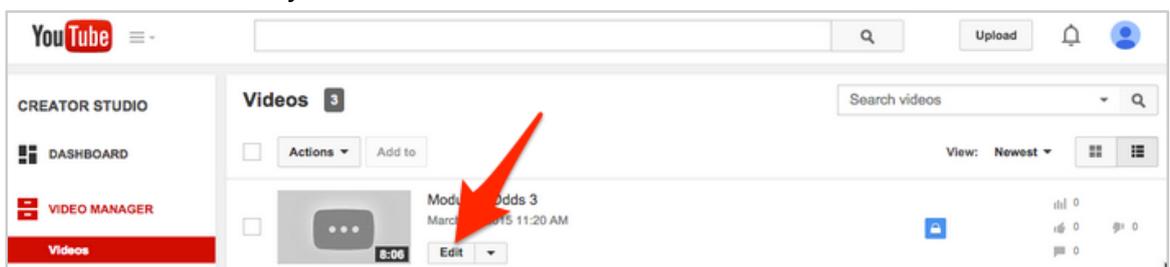
below.



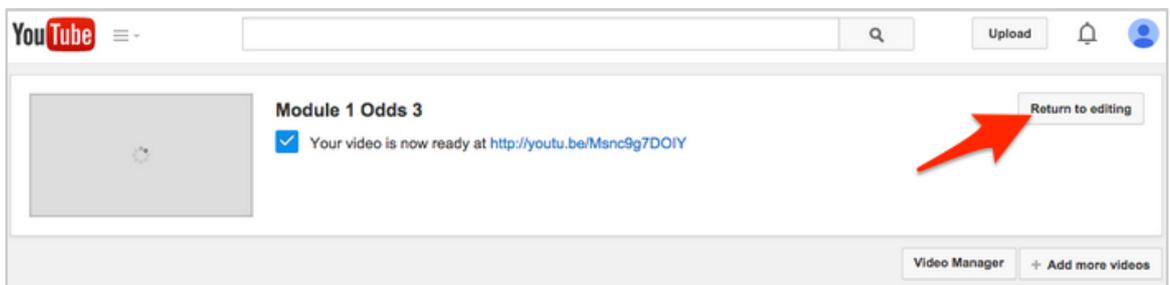
Adding closed captioning

Once your video has been processed, you will closed caption it. To do this:

1. Edit the video's settings. You can access the video's "Info and Settings" screen by clicking either the video's "Edit" button in the Video Manager, or the "Return to Editing" button on the video's summary screen.

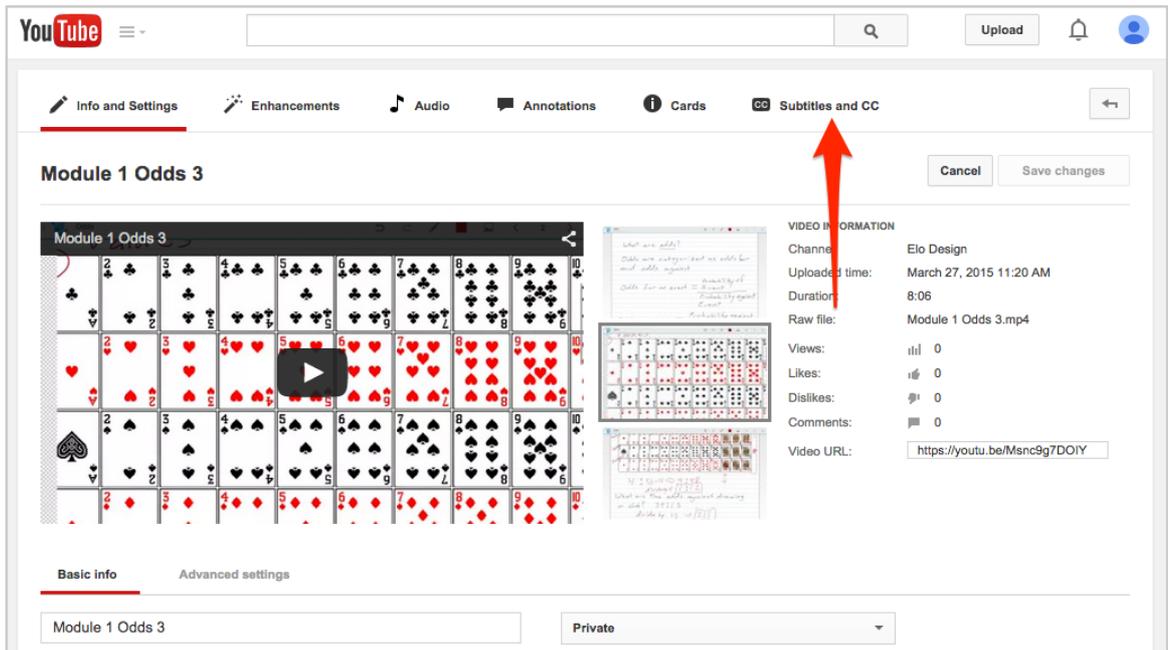


Accessing the Edit Settings screen, option 1: The "Edit" button in the Video Manager

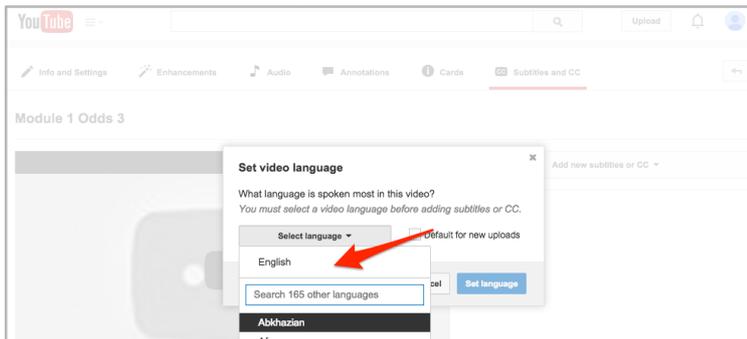


Accessing the Edit Settings screen, option 2: The "Return to editing" button on the video's summary screen

2. On the “Info and Settings” screen, click the “Subtitles and CC” button in the top right portion of the screen.

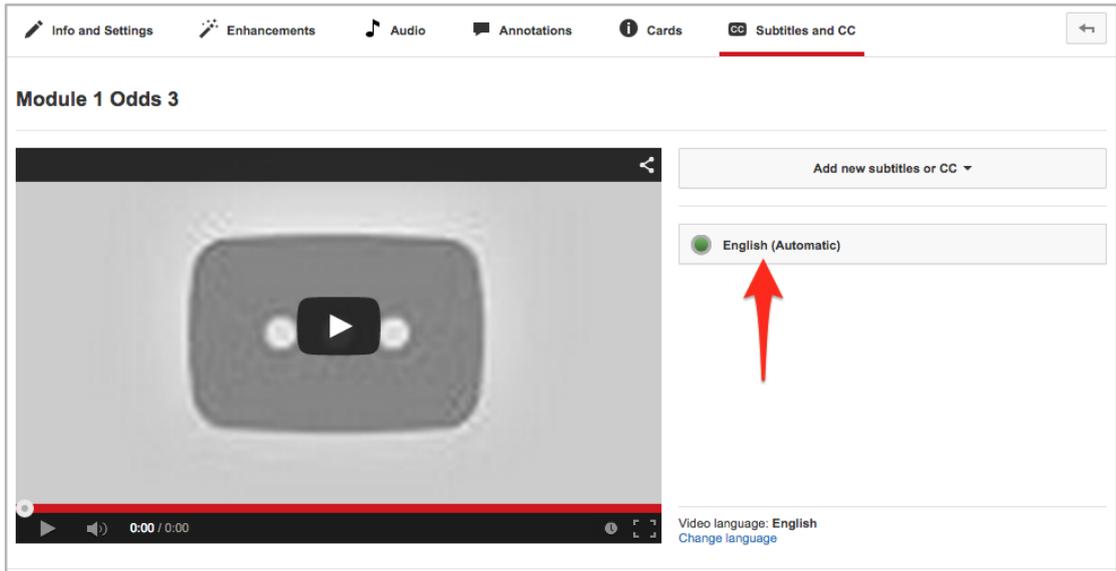


3. On the “Subtitles and CC” page, you will be asked to select a language. Select English or the language of your choice. Once you have selected a language, click the “Set Language” button in the bottom right portion of the dialog box.



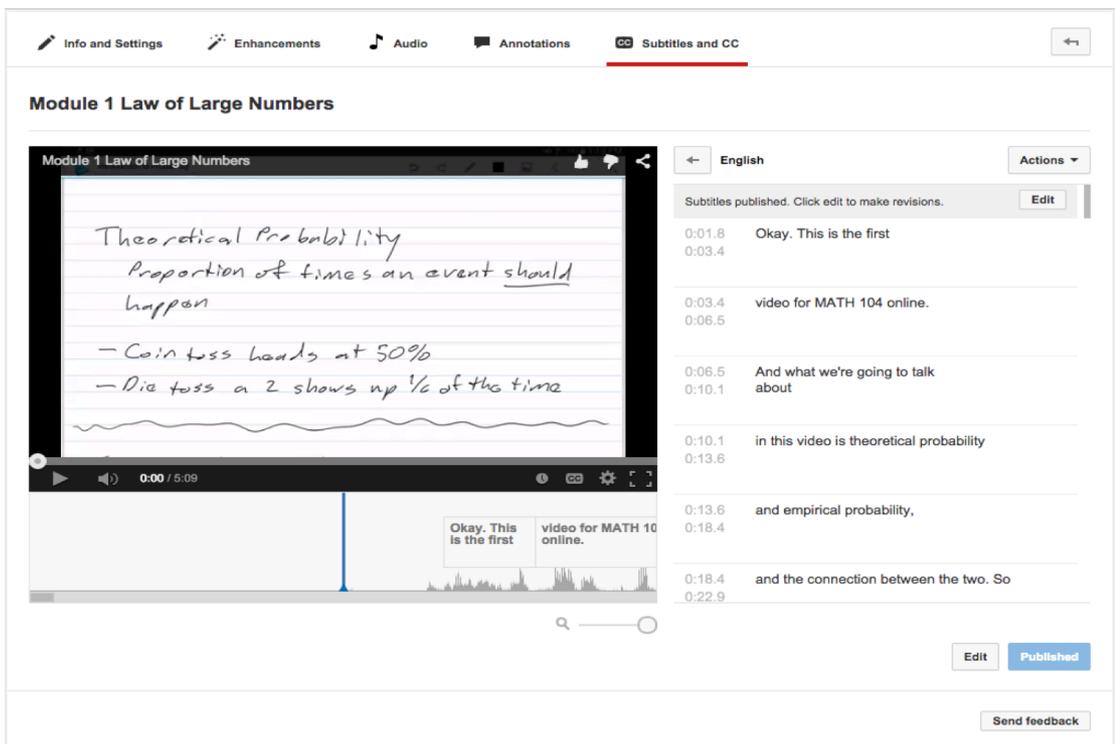
4. YouTube will attempt to create an automated captioning of your video. When it is finished, the automated captioning will appear as a button below the section “Add new subtitles or CC”. It will be listed as “English (automatic)”. **Automated captions are only 80% accurate; accuracy decreases with the increase in technical terms in the video.** However, the YouTube generated transcript serves as a useful starting place for further editing.

Click on the “English (Automated)” bar to edit your automated captions.



The "Subtitles and CC" page with automated captioning completed

5. This will direct you to the transcription page. The video is shown on the left, while the captions are on the right. Each caption is time stamped.



- Click the edit button to make changes to the captions/subtitles.

Module 1 Odds 3

English

Actions

Subtitles published. Click edit to make revisions. **Edit**

0:02.8	okay in the studio we are going to discuss something that is
0:05.6	related to probability but it's not exactly the same
0:09.3	and unfortunately in everyday speech many people
0:13.6	use one place and the other so we're talking about artist
0:18.0	and you'll hear people say are jar
0:22.1	or to their high arts for this for high odds against us

Edit Published

- First, adjust the text. To do this, click the text you wish to adjust. The text will become editable. After you have made your changes, click outside of the textbox to save your changes.

0:02.8 okay in the studio we are going to discuss something that is

0:06.0

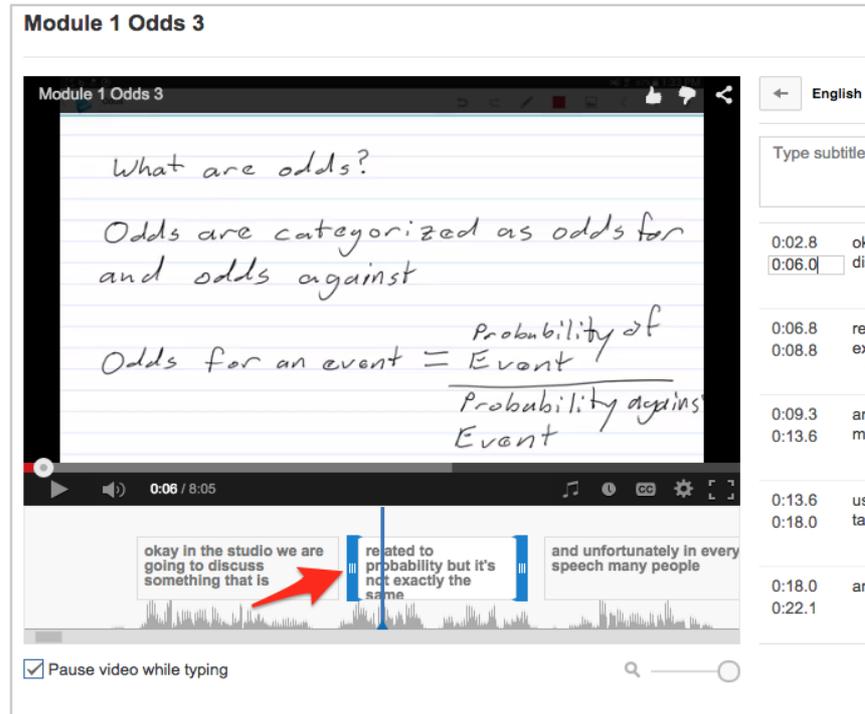
- Next, adjust the timings if needed. There are two ways to do this.
 - Edit the timing text next to the text items. Click the time you wish to adjust and type in a new start or end time. The start time cannot overlap with the end time of the previous caption, and the end time cannot overlap with the start time of the next caption.

0:02.8 okay in the studio we are going to discuss something that is

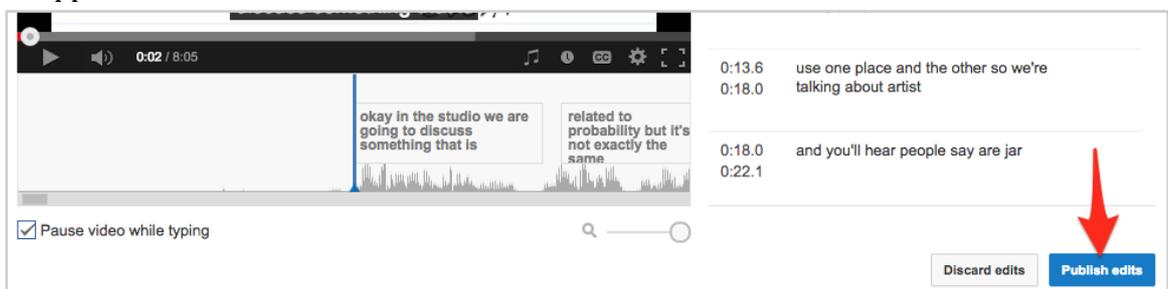
0:06.7

0:06.8 related to probability but it's not

- Or, select the item whose time you wish to adjust in the caption bar below the video. Blue bars will appear to the left and right of it. Drag the bars to adjust the times.



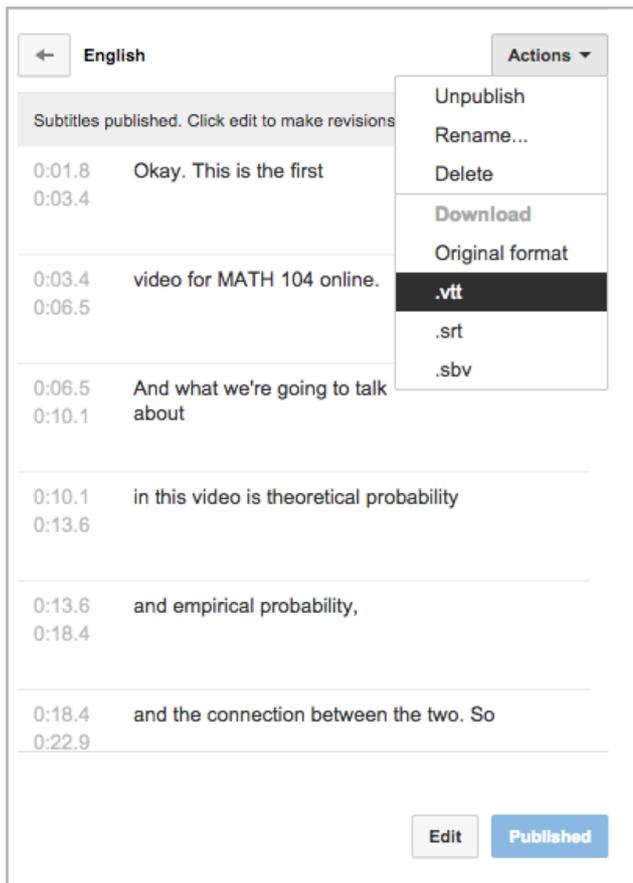
9. After you are done with your modifications, click the **Publish** button at the bottom of the screen to save your changes. If you do not do this, all of your changes will disappear.



Exporting your closed captions for use elsewhere

YouTube captions can be downloaded in a standard captioning file format for use in other video production applications and in video streaming sites such as Vimeo. Caption files contain captioning information about a video. The caption file is stored separately from the video file.

1. Click “Actions” button on the upper right hand corner of the page. This will open a drop down menu where you can choose one of several captioning file formats to download. The .vtt format is a good choice, because it can be used by many applications and video streaming services.



2. When you select the file format in the “Actions” menu, a file will be downloaded to your default downloads folder. You will be able to see it in your browser’s list of downloads.
3. Store the video file and the captioning file together for future use.

Camtasia – screen recording software

[Camtasia](#) is a screen recording software that supports both manual and auto captioning. Auto captioning uses speech-to-text technology that automatically creates captions from audio in the timeline. Click on the links below for details on creating closed captions in Camtasia.

- [How to create captions using speech-to-text](#)
- [How to create captions manually](#)
- [Export caption files when you are finished](#)

Transcribing a video using Dragon Naturally Speaking

Dragon Naturally Speaking can be used to create transcripts that can be fed into YouTube to add time codes. Transcribing a video using Dragon NaturallySpeaking requires the following steps:

1. [Extract an audio file from your video recording.](#) You can do this using either Camtasia or the free media viewer VLC.
2. [Select a Dragon NaturallySpeaking profile, or create one if you don't already have one.](#)
3. [Transcribe an audio file with Dragon Naturally Speaking](#) and save the transcription as text file.
4. [Polishing the transcript.](#)
 - a. [optional] [Increase the accuracy of Dragon NatuallySpeaking's transcription](#) and [re-transcribe the audio file.](#)
 - b. [Read the transcript and make final corrections.](#)

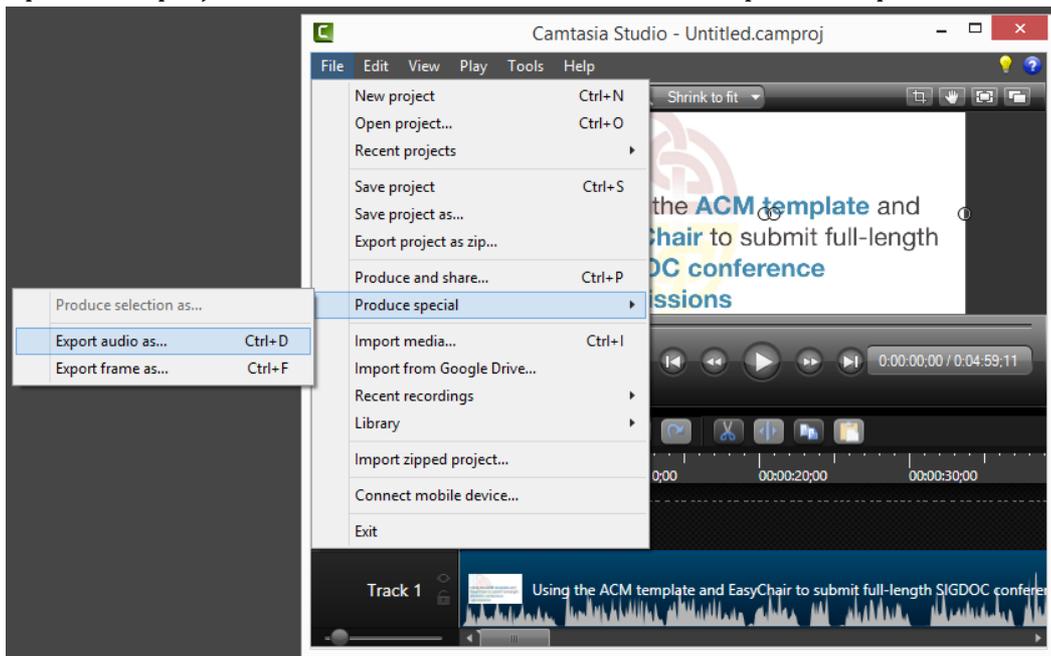
1. Extracting audio from a video

There are two ways to extract audio from a video file and save it as an audio file. You can either use Camtasia or the VLC Player for this task.

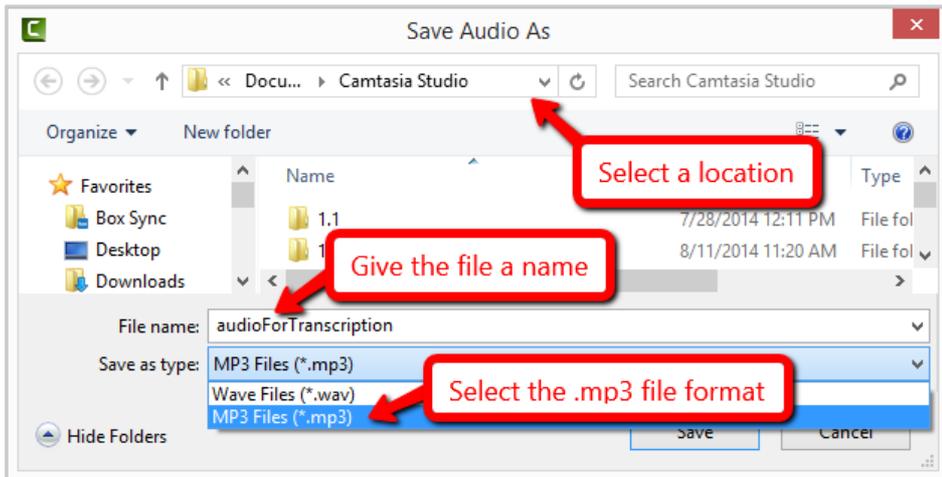
Camtasia

To create an audio file containing the sound from a Camtasia project:

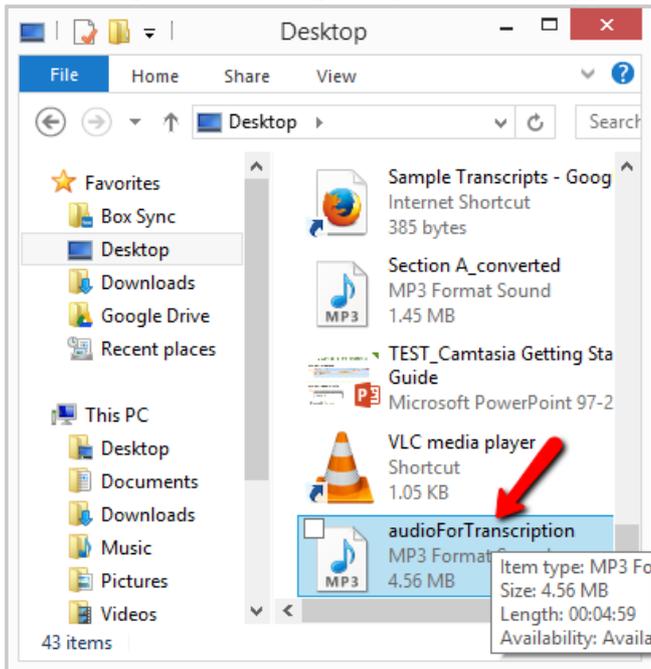
1. Open a .camproj file in Camtasia and select File->Produce special->Export audio as...



2. Save the audio file in .mp3 format. Be sure to save it in a location where you will be able to locate it later.



3. When the process is complete, your file will appear in the folder you specified.

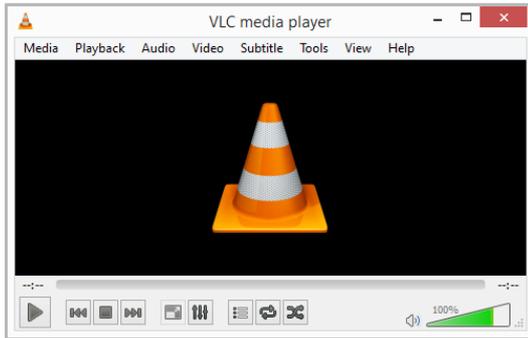


Using VLC to extract audio from an existing video

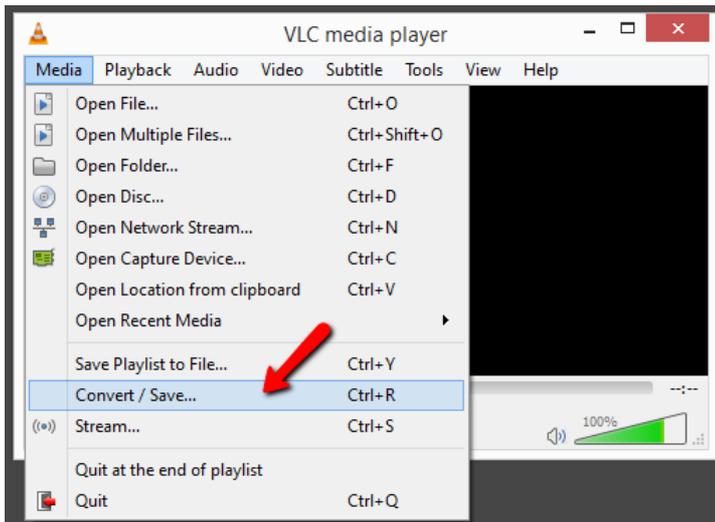
VLC is a free media player and will allow you to export audio from an existing .mp4 video file.

VLC can be downloaded from VideoLAN. To export audio from an .mp4 video file, do the following:

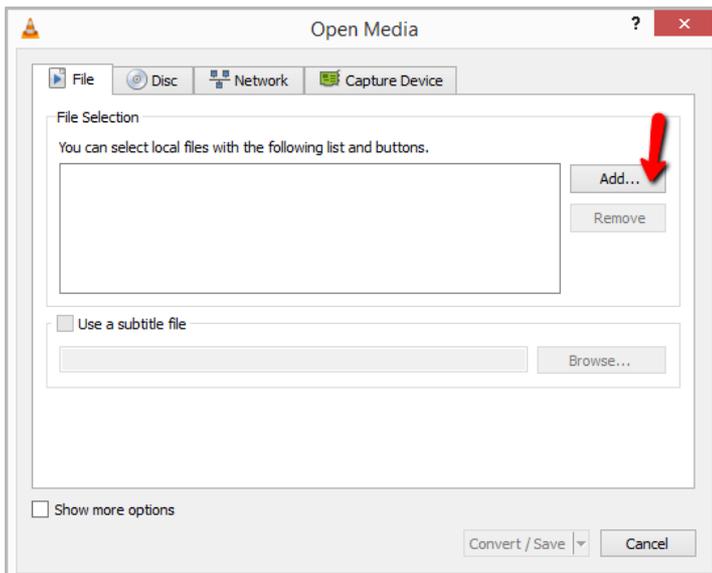
1. Open the VLC media player.



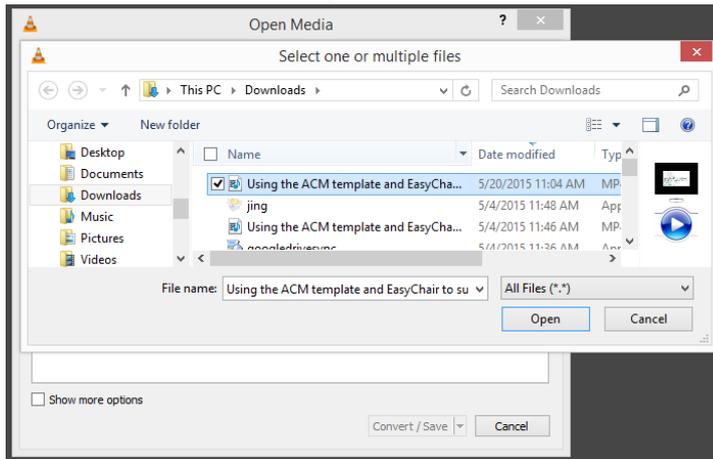
2. Select Media->Convert/Save.



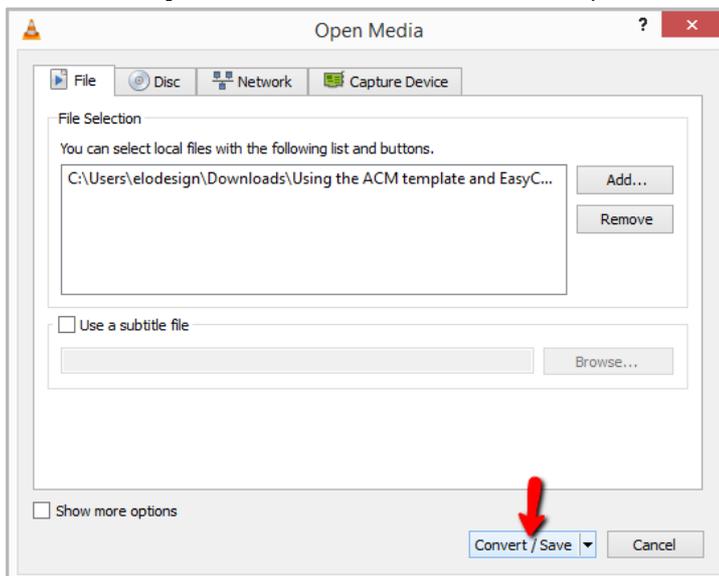
3. Click the "Add" button.



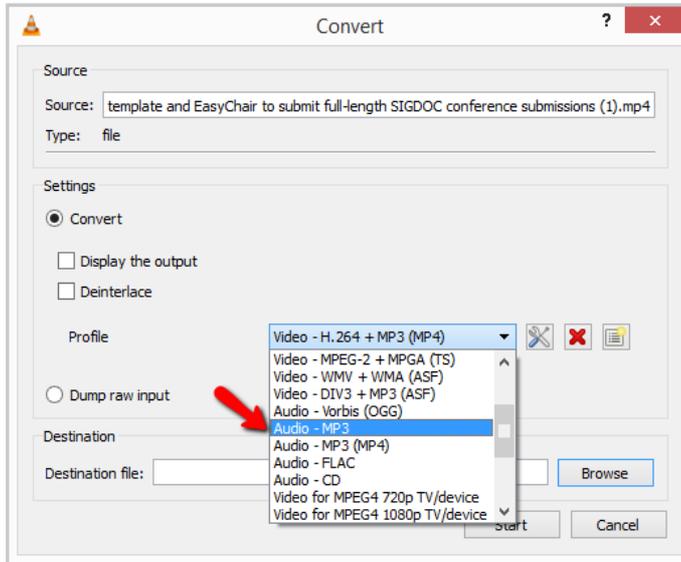
4. Select the .mp4 containing the audio and click “Open”.



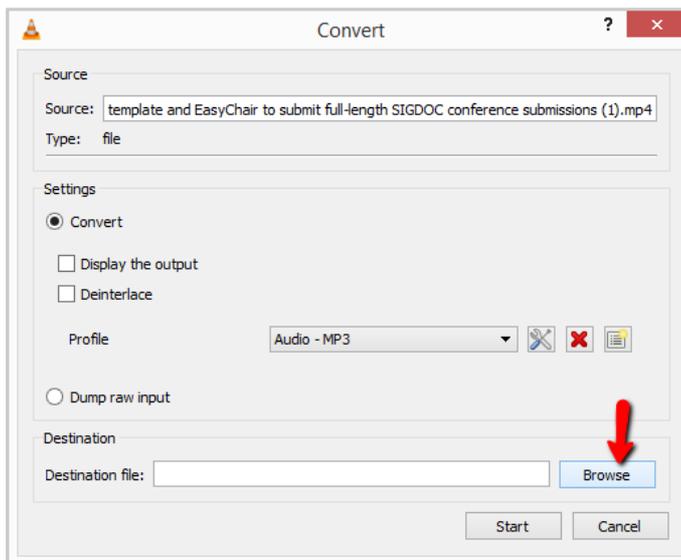
5. Click “Convert/Save” at the bottom of the window. You do not need to make a selection from the drop down menu beside the “Convert/Save” button.



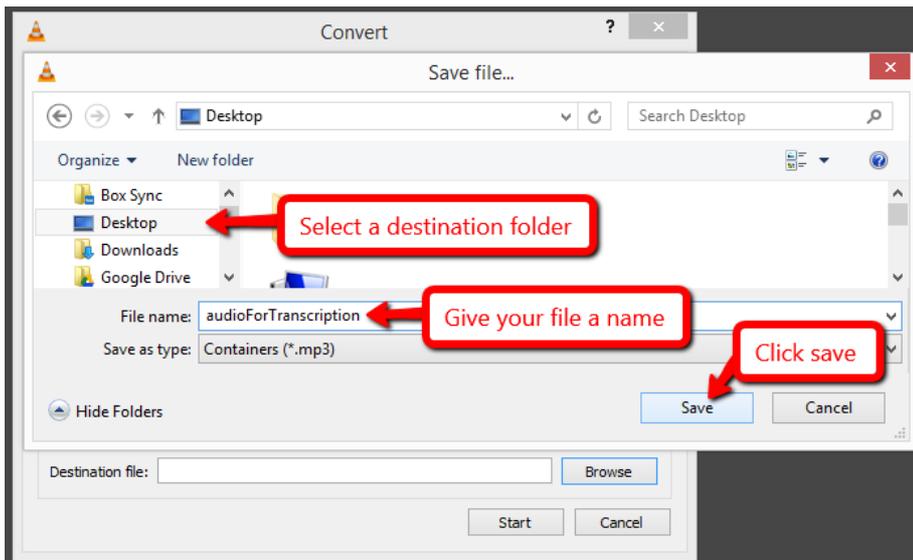
6. Select "Audio - MP3" from the "Profile" menu.



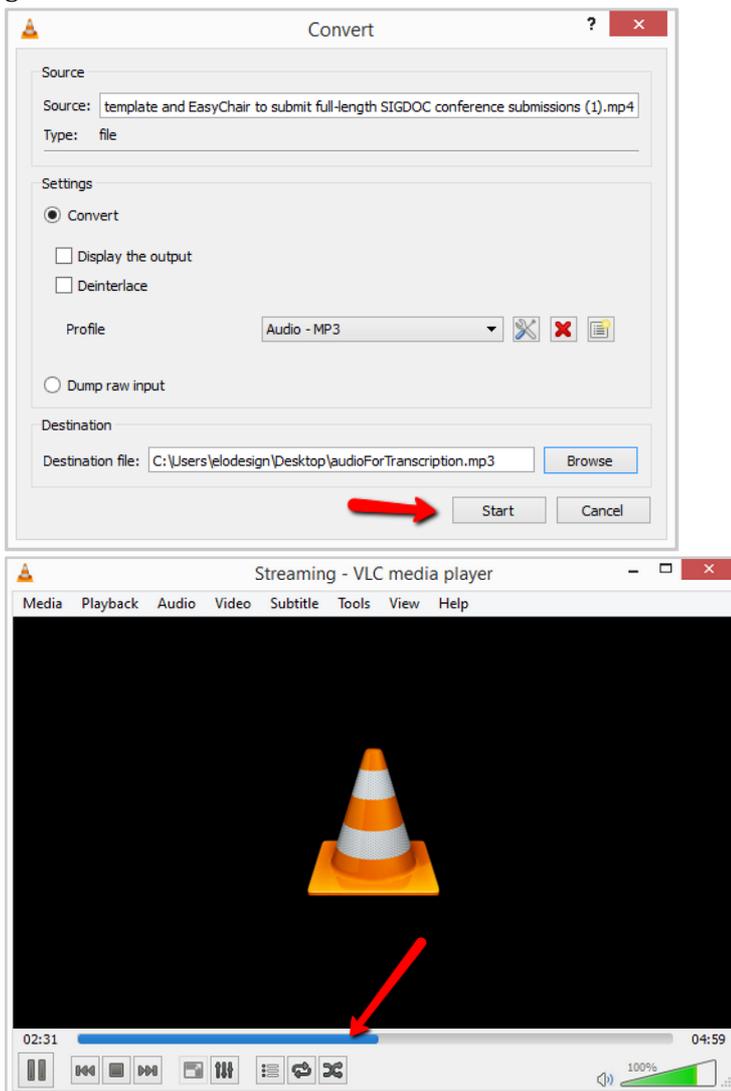
7. Click the "Browse" button next to "Destination file" in the area at the bottom of the window.



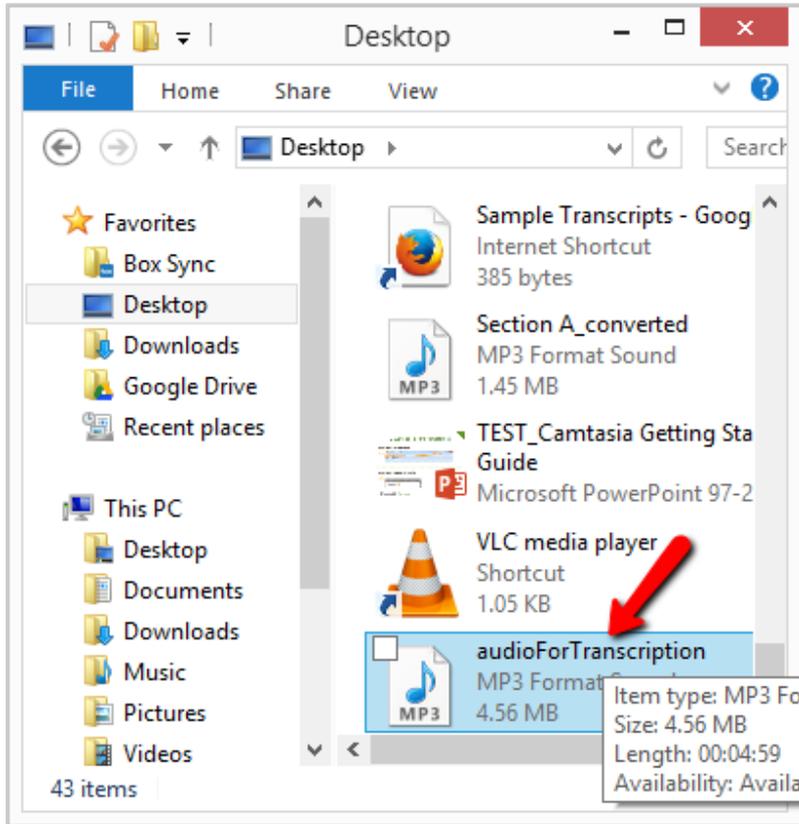
8. In the window that appears, select the folder that will contain the audio file, enter the name you want the audio file to have, and click "Save".



9. Click "Start" to begin the conversion process. When you do this, you will be returned to the VLC media player, which should display a progress bar as your audio file is being generated.



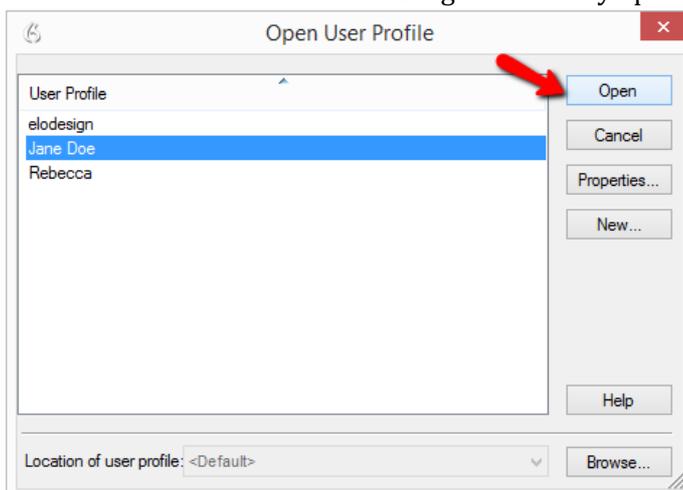
10. When the process is complete, your file will appear in the folder you specified.



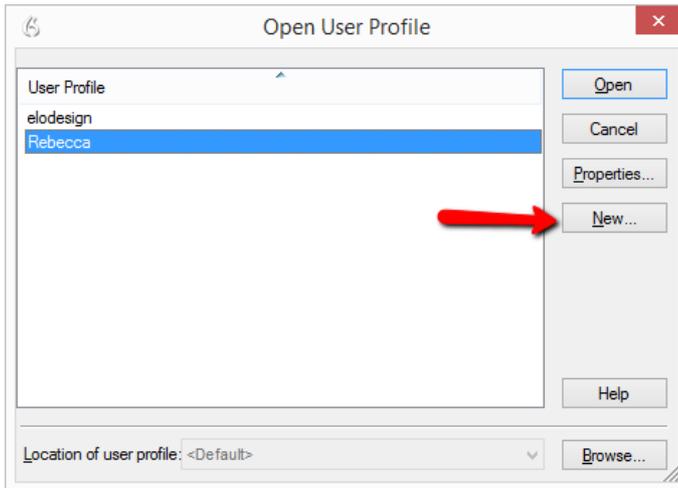
2. Selecting or creating a profile in Dragon NaturallySpeaking

The first time you use Dragon NaturallySpeaking, you will need to create a user profile. Your user profile is created using your/a recording of your voice. It allows Dragon to recognize your voice and speaking style.

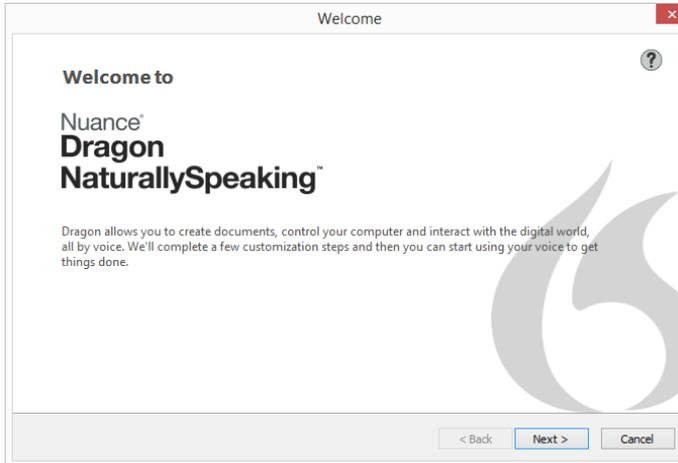
1. When you first open Dragon NaturallySpeaking, the “Open User Profile” dialog box will appear. If you already have a profile, select the profile name, click “Open,” and skip to “Transcribe the audio file with Dragon Naturally Speaking”.



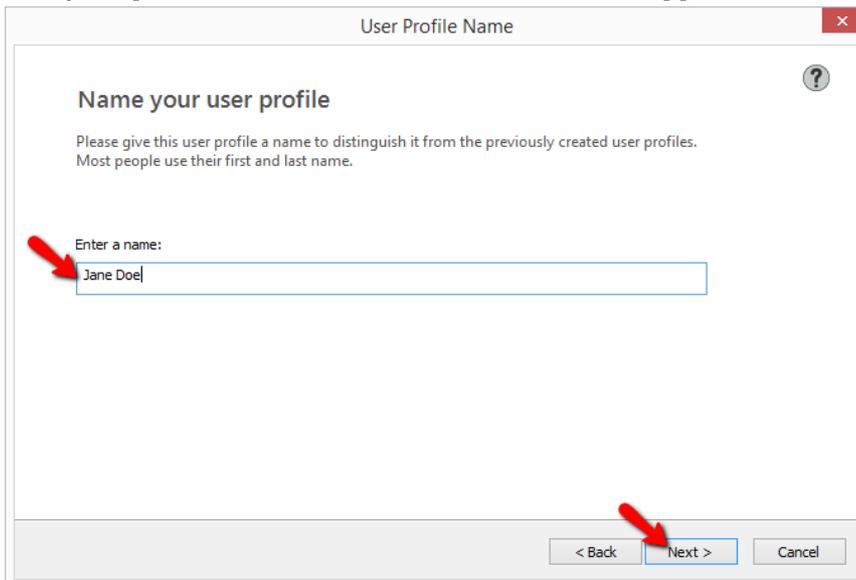
2. If you do not have a profile, click “New” to create a new profile and follow the steps below.



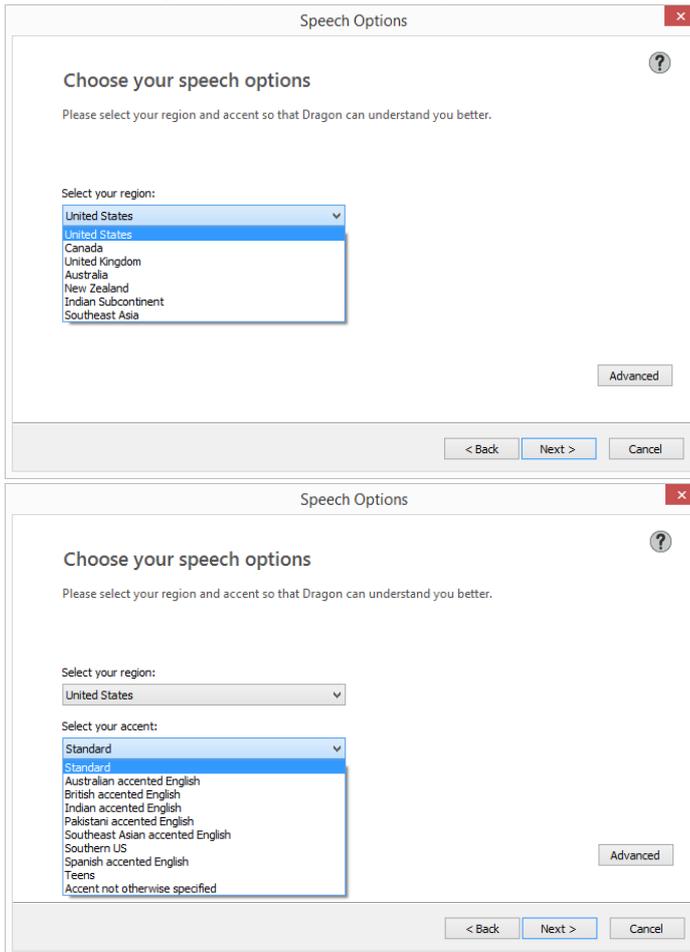
3. The “Welcome” dialog box will appear. This is the first in a series of dialog boxes that will guide you through the profile creation process. Click “Next” to continue.



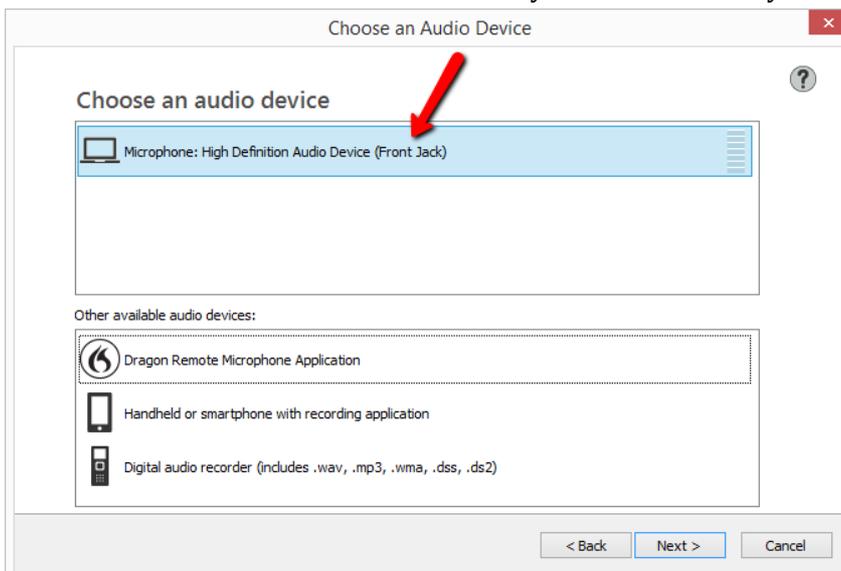
4. Give your profile a name. This is the name that will appear in the list of user profiles.



5. Select the region you are from and your accent.



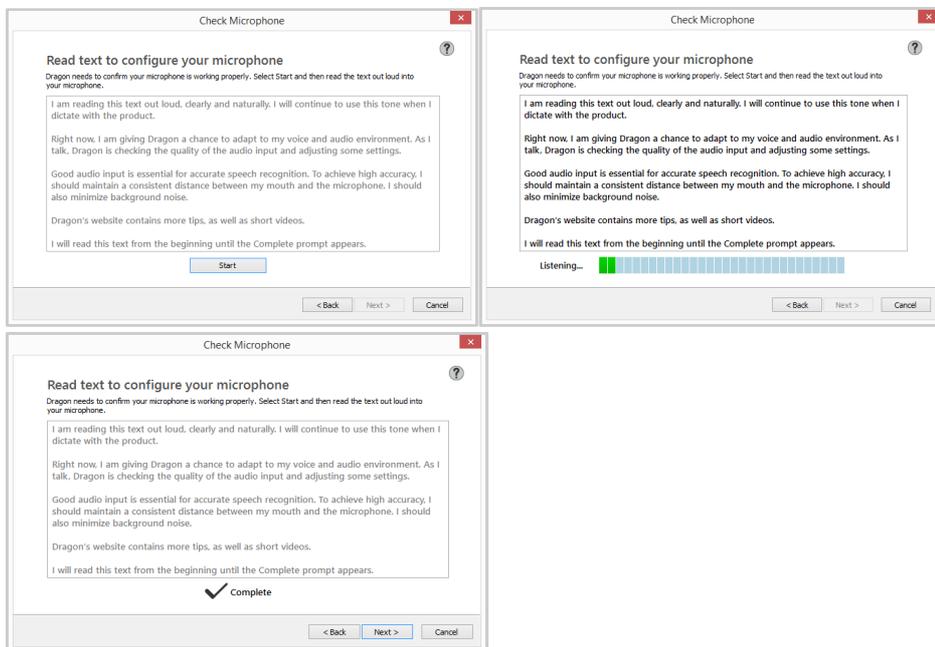
6. Select an audio device. You want “Microphone: High Definition Audio Device”, as this will be the most similar to the device that you used to create your audio.



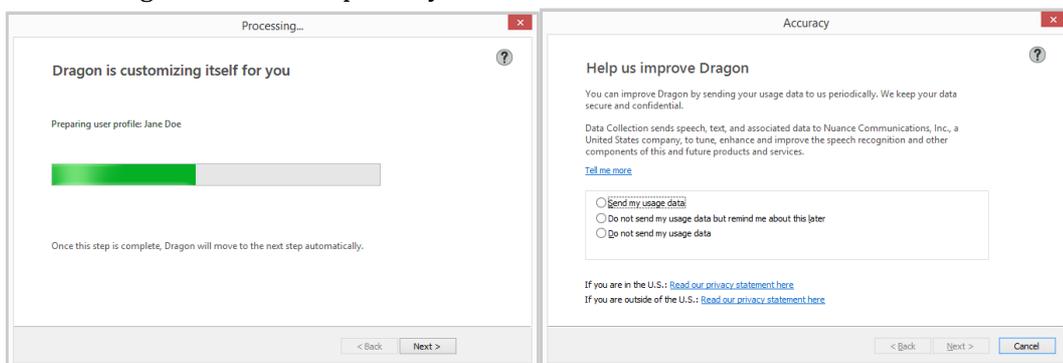
7. Position your microphone as recommended. You will be using it to record a brief test recording. Click “Next”.



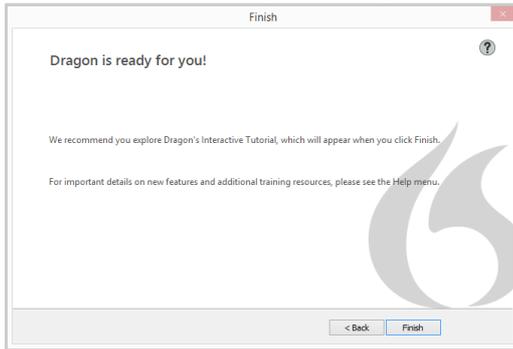
8. Click “Start”, and read the text shown. When Dragon NaturallySpeaking has heard enough, a check mark with the word “Complete” will appear at the bottom of the dialog box and the “Next” button will become active. Click the button to continue.



9. Dragon will process your sample recording and automatically move on to a dialog box in which it asks if you want to send data about your usage practices to the company that makes Dragon. Select the options you want and click “Next”.



10. Click “Finish” to complete the profile setup process.

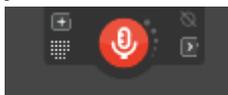


3. Transcribe the audio file with Dragon NaturallySpeaking and save the transcript as text file

In this step, you will create a text transcription file in Dragon NaturallySpeaking’s DragonPad and save the resulting text as a plain text document. You will need a plain text document to upload to video captioning services such as YouTube.

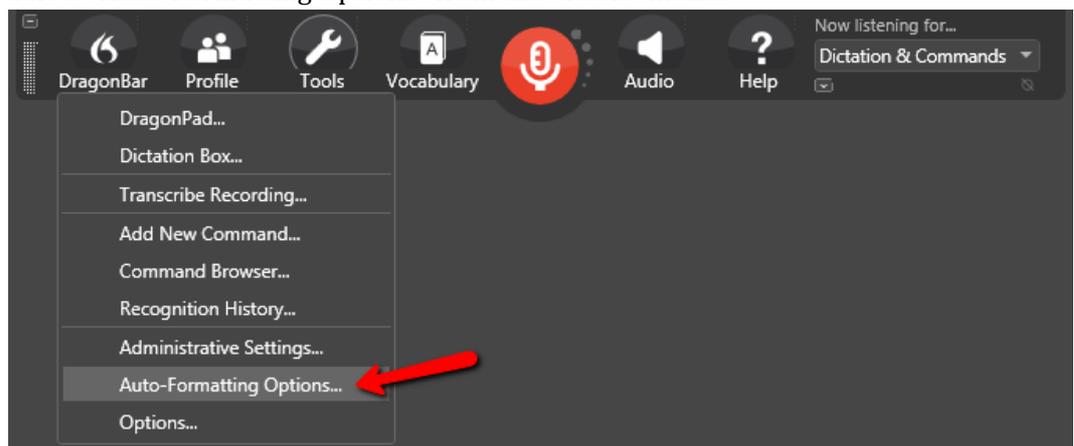
Transcribing your audio file in DragonPad

1. Once you’ve created or opened your profile(s), a small interface will appear at the top of your screen. Hover over the interface to see the full Dragon NatuallySpeaking menu.

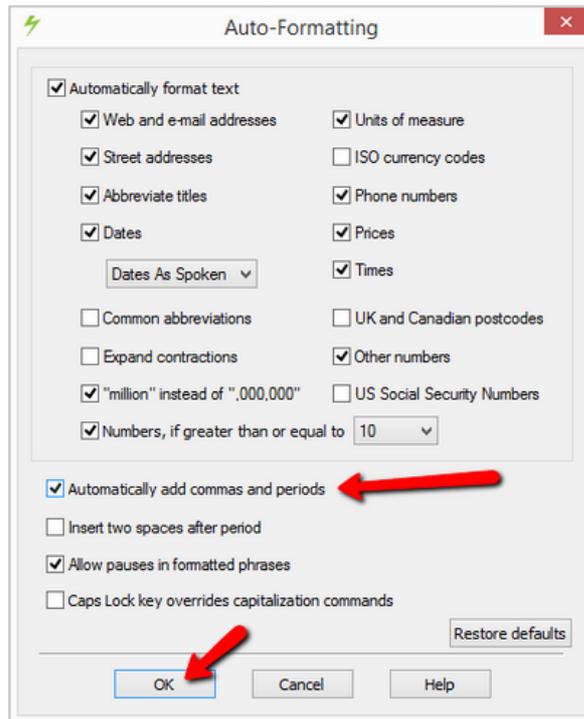


2. By default, Dragon NatuallySpeaking will only add punctuation when a punctuation command such as “period” or “comma” is uttered. There is a formatting option that you can turn on that will tell Dragon to add periods and commas based on the length of your pauses. **It is very important to activate this option when you are transcribing audio from a video recording.** To activate the “add commas and periods” option:

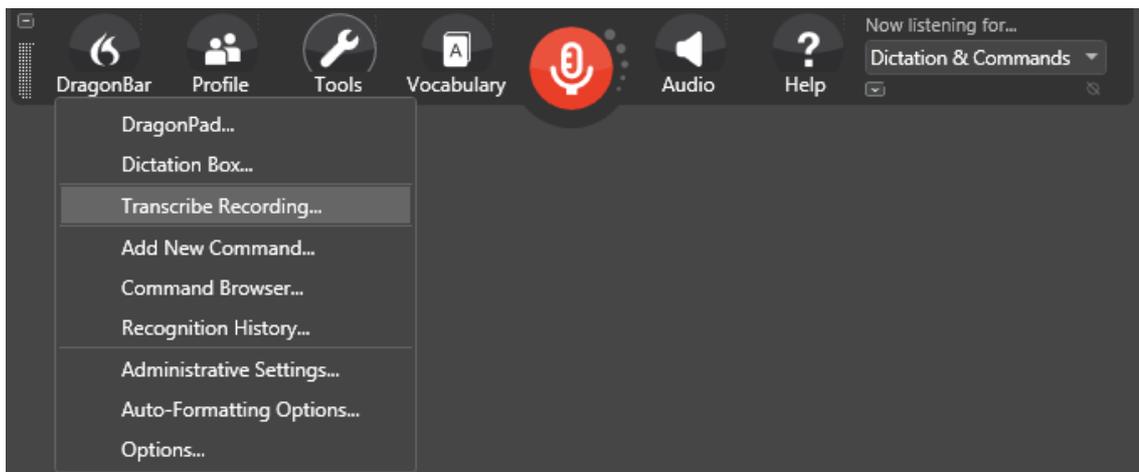
- a. Select “Auto-Formatting Options” from the “Tools” menu.



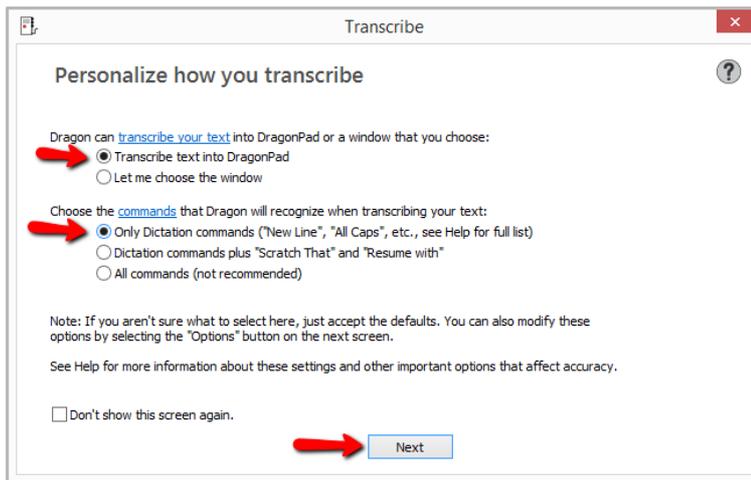
- b. Select “Automatically add commas and periods” and click “OK”.



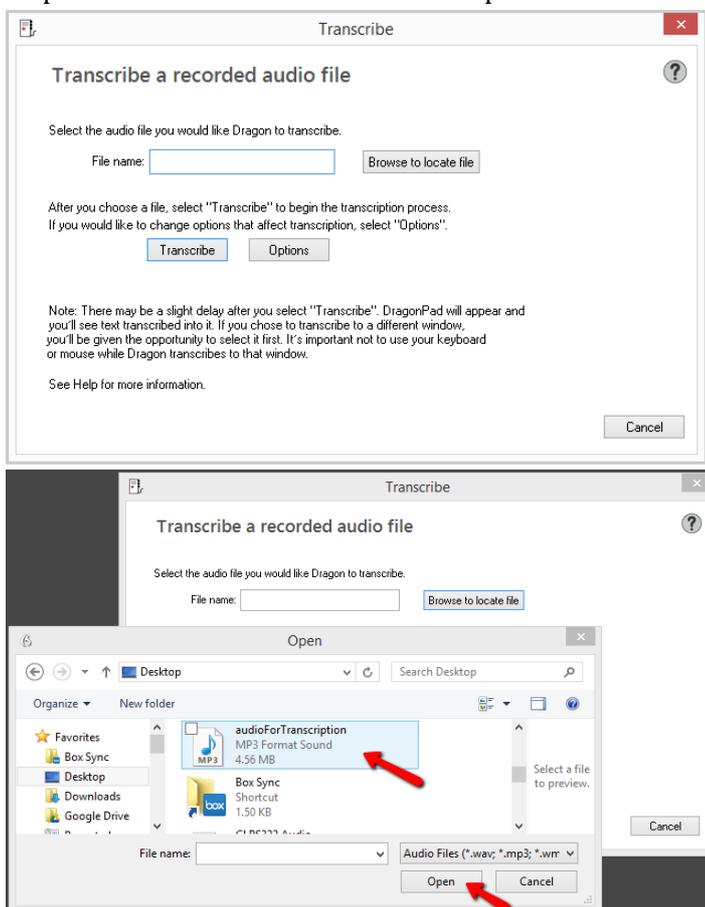
3. To begin transcribing your recording, select “Transcribe Recording” from the Tools menu.



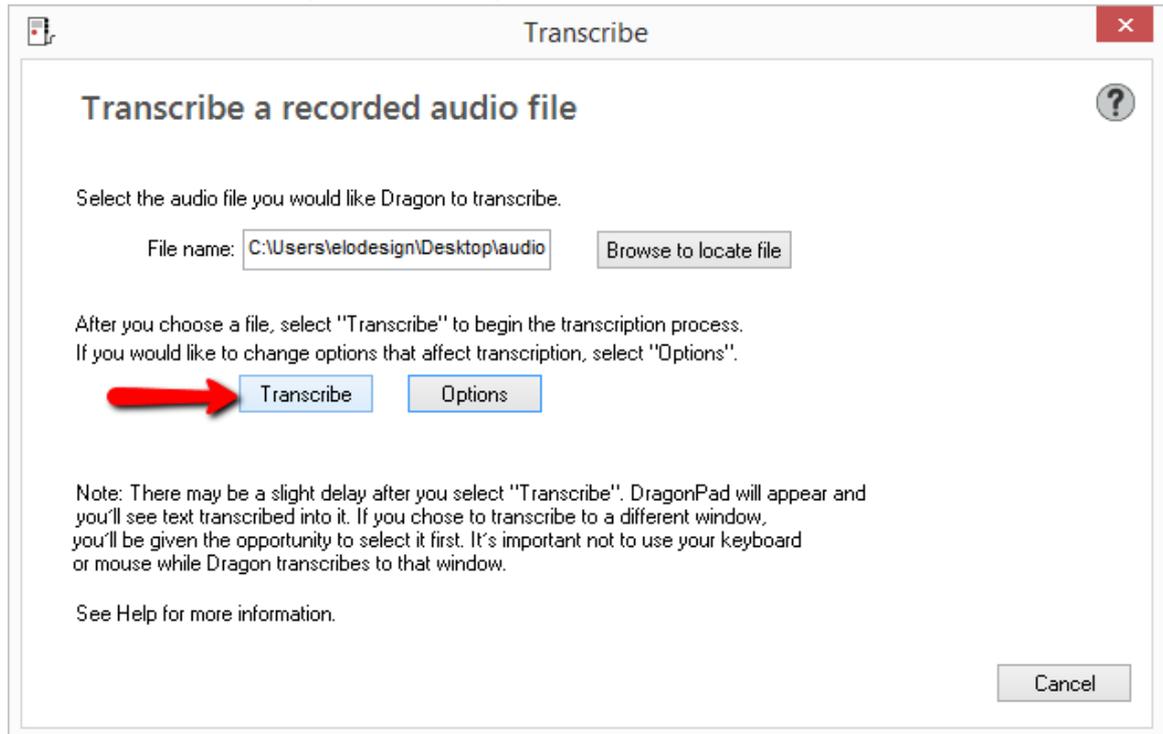
4. Dragon NaturallySpeaking will ask you how you wish to transcribe your document. Select “Transcribe text into DragonPad” and “Only Dictation commands”. Click “Next” to continue.



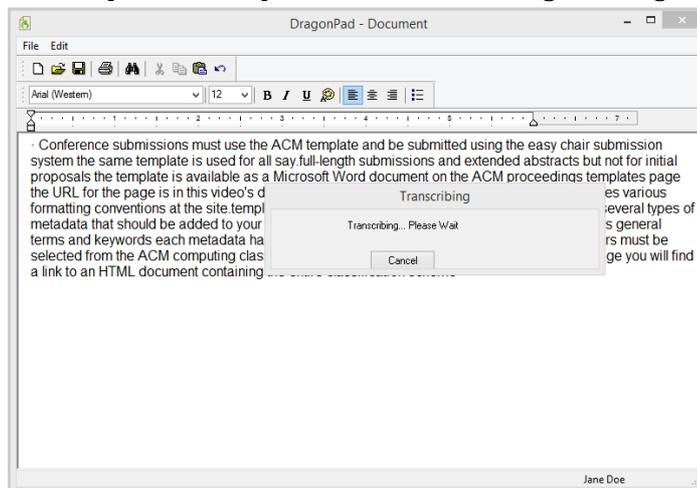
5. Click "Browse to locate file". Dragon NaturallySpeaking will display a dialog box where you can navigate to the audio file that you created in "Extracting audio from a video" step earlier. Select the file and click "Open".



6. Click "Transcribe" to begin transcribing the audio file.



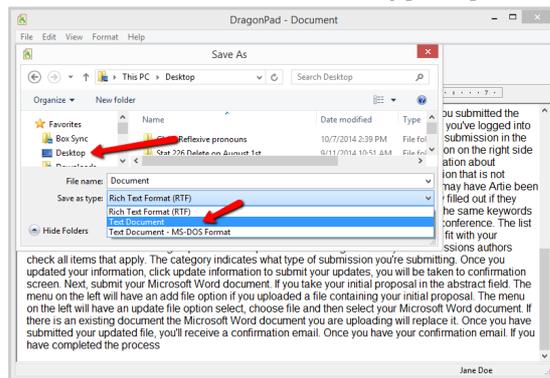
7. The transcribed text will appear in Dragon NaturallySpeaking's built-in text editor, DragonPad. DragonPad will appear automatically when transcription starts. When transcription is complete, the "Transcribing" message window will clear.



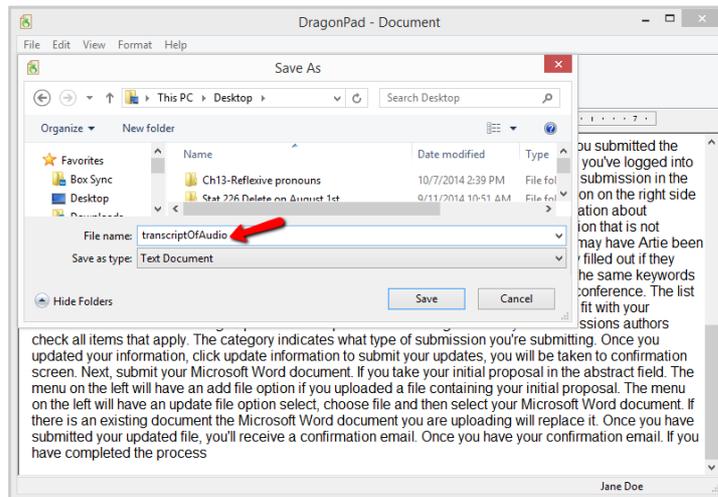
Exporting a text file containing your transcribed text

1. To save the text in DragonPad, click File->Save.

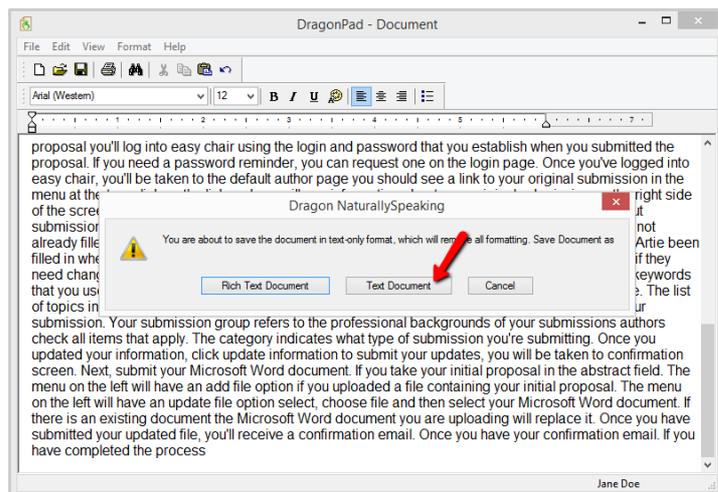
- a. Select the folder that you want the transcript to be saved to, and select “Text Document” from the “Save as type” options.



- b. Give your transcript a name and click “Save”.



- c. When the “You are about to save the document in text-only format...” message displays, click the “Text Document” button to confirm that you want a plain text document.



- d. Your newly created file will appear in the folder you specified.

4. Polishing the Transcript

Increasing the accuracy of Dragon NaturallySpeaking's transcription

A document transcribed using the technique described above should have good recognition, but it will not be perfect. Potential problem areas include:

- Acronyms
- Specialized terminology
- Dragon NaturallySpeaking misinterpreting specific words

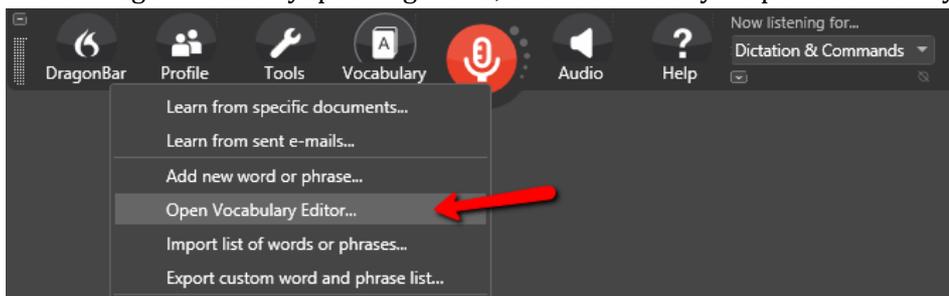
These issues can be addressed by adding words and acronyms that Dragon NaturallySpeaking isn't recognizing to Dragon NaturallySpeaking's Vocabulary Editor. The Vocabulary Editor can also be used to train Dragon NaturallySpeaking to recognize how you say certain words.

Adding words to Dragon NaturallySpeaking's Vocabulary Editor

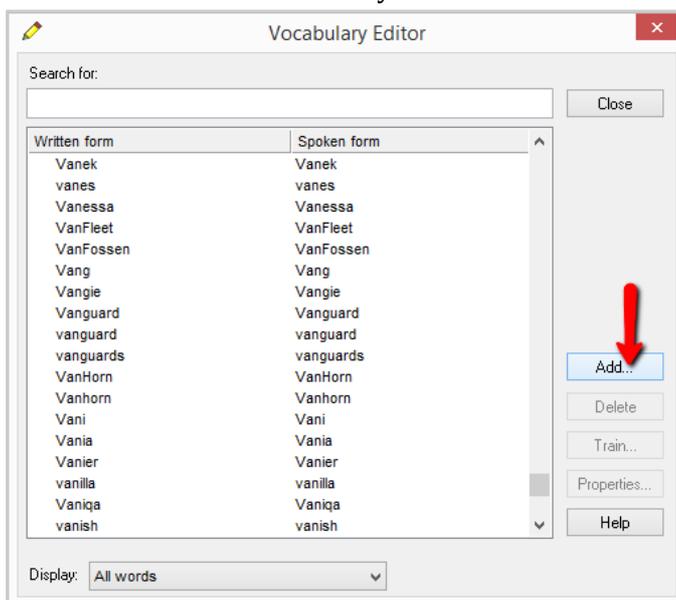
When you first transcribe your audio, you may find that Dragon NaturallySpeaking misinterprets certain words and acronyms. In the sample recording used for this document, for example "SIGDOC" (pronounced "sig doc") is typically transcribed as "sick." and ACM is transcribed as "ACN" or "ICM". To prevent this from happening "SIGDOC" and "ACM" will need to be added to Dragon NaturallySpeaking's Vocabulary Editor.

To add a word to the Vocabulary Editor:

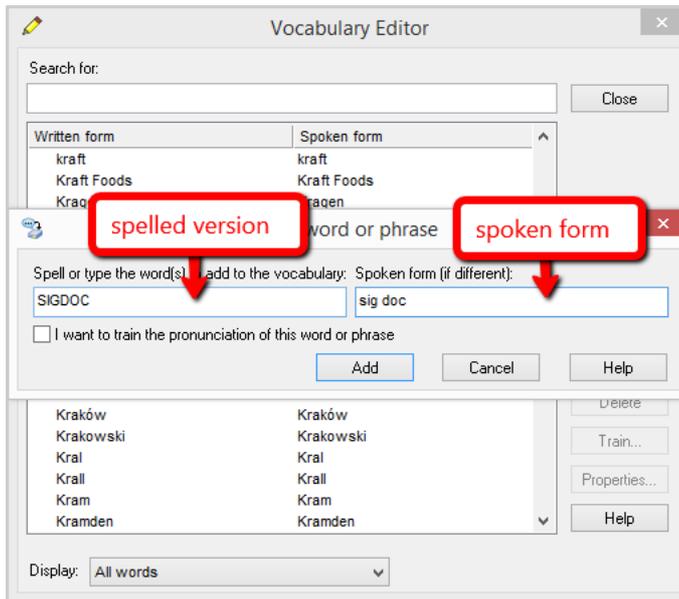
1. In the Dragon NaturallySpeaking menu, click Vocabulary->Open Vocabulary Editor.



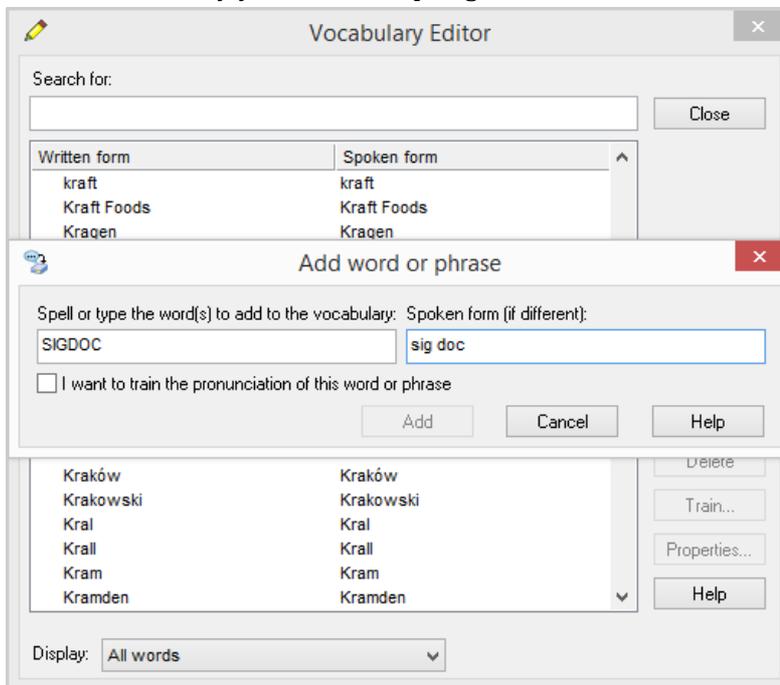
2. A window containing a list of currently available vocabulary will be displayed. Click "Add" to add a new vocabulary term.



- You will be asked to enter two forms of the word: the spelled version and the spoken form. For SIGDOC, the spelled version of the word, which goes in the first text field, would be “SIGDOC”. The “spoken form”, which goes in the second text field, would be “sig doc”.



- If the “Add” button is dimmed after you’ve added both the spelled and spoken versions of the word, this means that there is already an entry in the Vocabulary Editor that matches the entry you are attempting to add.

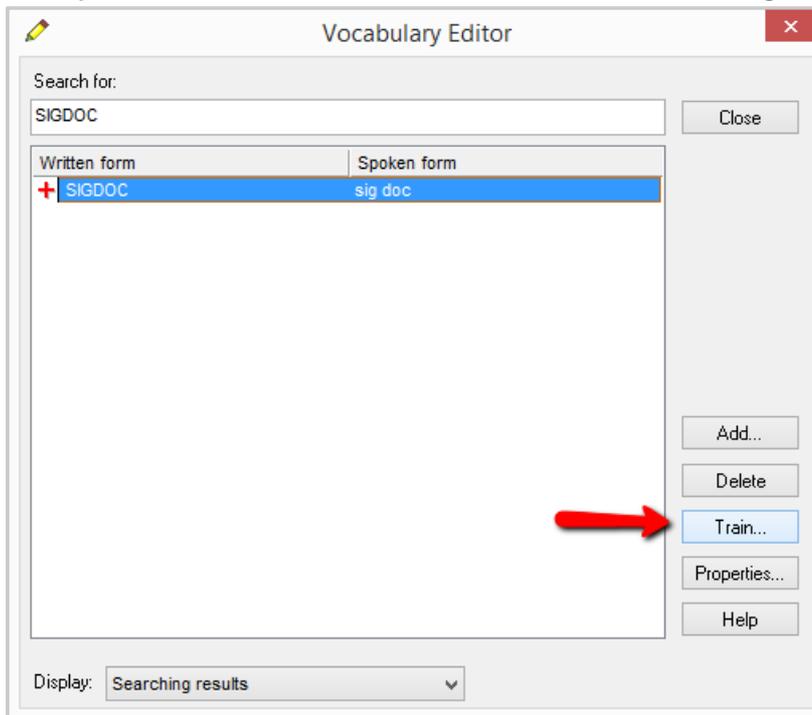


Training Dragon NaturallySpeaking to recognize how you say certain words

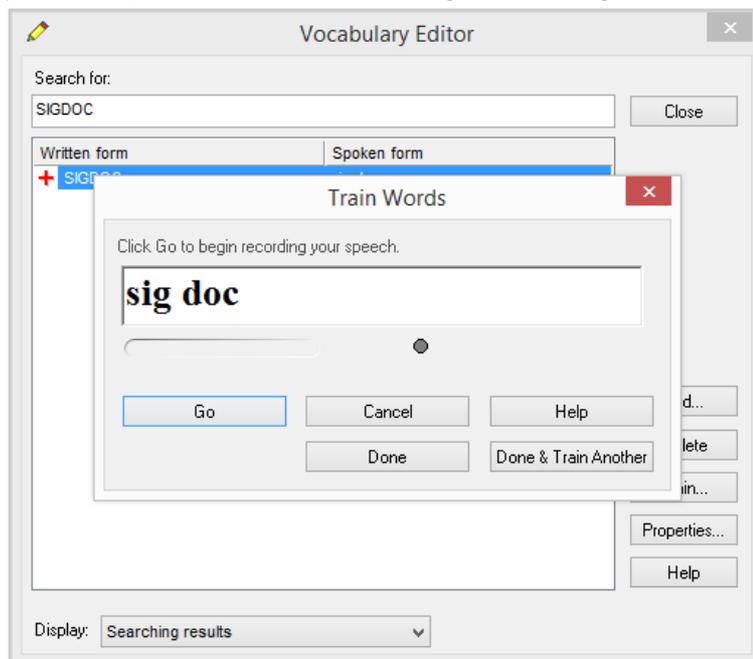
In addition to adding words to the dictionary, you can also train Dragon NaturallySpeaking to recognize how you say certain words. This can be helpful when you add a new term or when there is a word or term that Dragon NaturallySpeaking is consistently getting wrong.

To train Dragon NaturallySpeaking to recognize how you say a word:

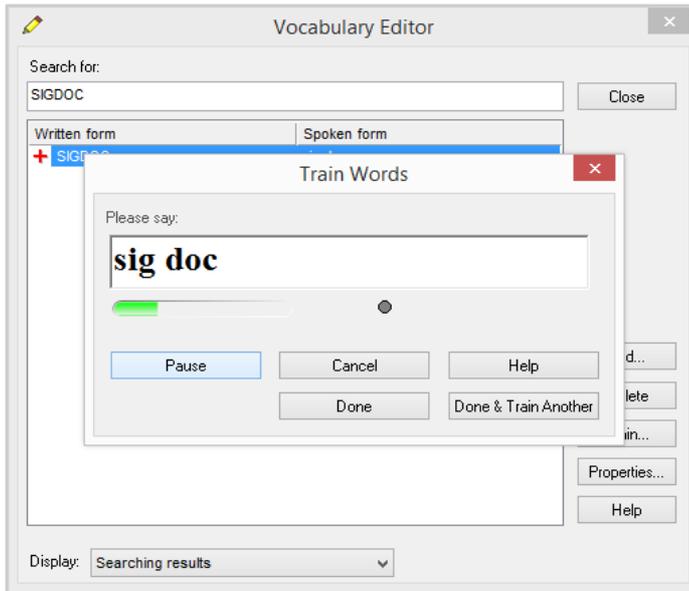
1. In the Vocabulary Editor, search for the word you want to train. If it exists, select the word you want to train and click the “Train” button on the right.



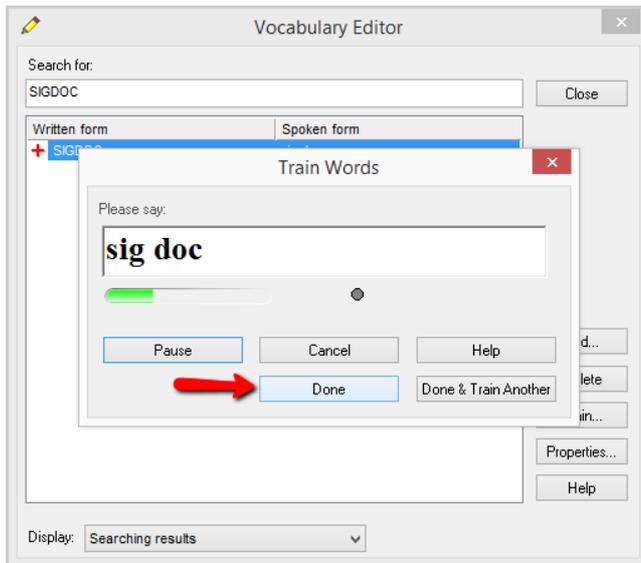
2. The “Train Words” dialog box will appear. Make sure your microphone is attached to your computer and click “Go” to begin recording.



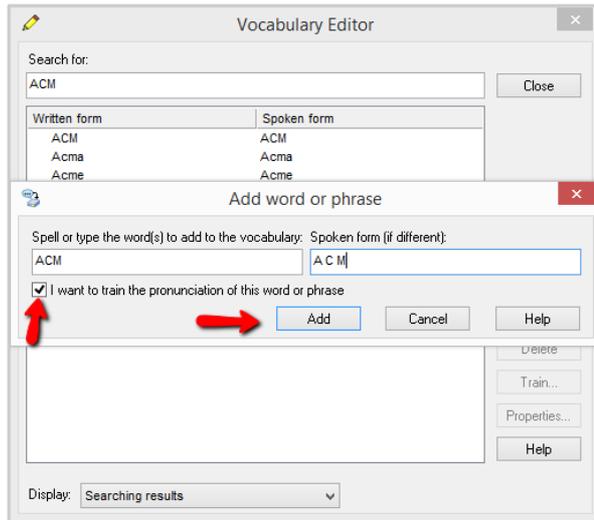
3. If your voice is being recorded correctly, you will see a green bar as you record. If you don't see this bar, you will need to check your microphone setup.



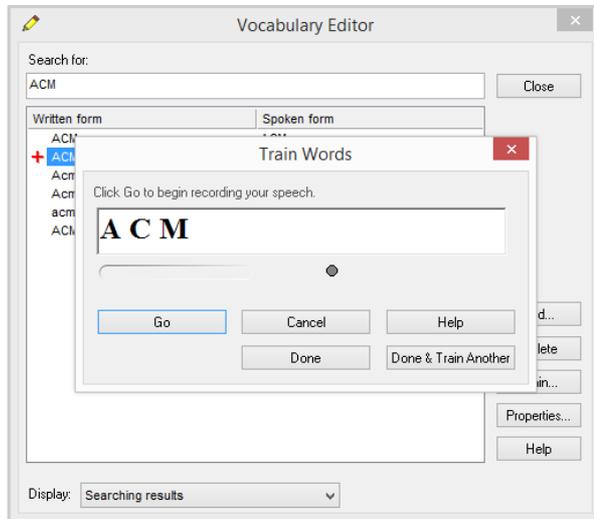
4. After you have recorded the word, click “Done”.



5. If the term you want to train does not exist, add the term, and check the checkbox next to “I want to train the pronunciation of this word or phrase”. When you click “Add”, the “Train Words” dialog box will appear. You can then train your word as described in the previous steps.



6.



7.

Re-transcribe the audio file

Once you've trained the words that Dragon NaturallySpeaking was getting wrong most frequently, you will want to re-transcribe your audio file using the steps in "[Transcribe the audio file with Dragon NaturallySpeaking](#)".

Read the transcript and make final corrections

Dragon NaturallySpeaking will generally do a good job of creating transcriptions, but it is not perfect. Even with training, some corrections to the transcript will be needed to get it to a finished state.

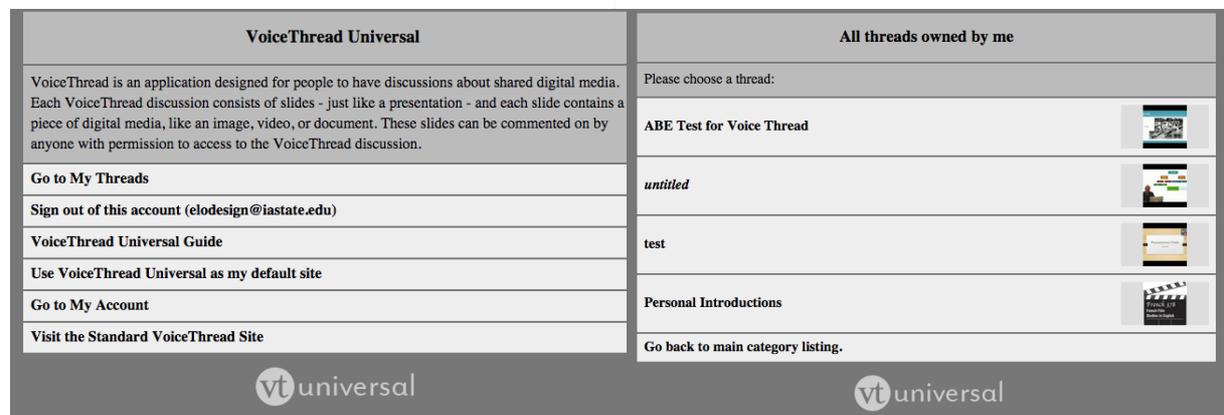
To complete the transcription process:

1. Read the transcript in DragonPad, making corrections where necessary.
2. Export a text file containing the transcript, as described in "[Exporting a text file containing your transcribed text](#)".

External Tools and Accessibility

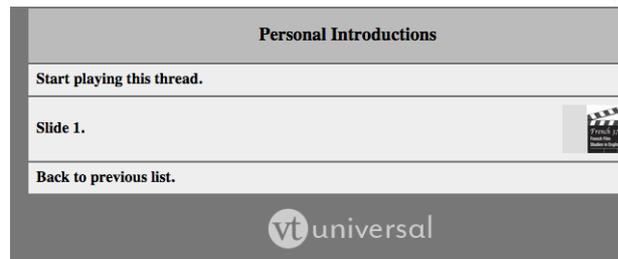
VoiceThread

VoiceThread offers VoiceThread universal, which is an alternative VoiceThread interface “specially designed to be used with screen-reading software and other assistive technologies” [[VoiceThread Accessibility home](#)]. It can be [viewed here](#).



1. The first page you see

2. The “My Threads” page



3. A VoiceThread



4. A VoiceThread Slide

VoiceThread and Captioning

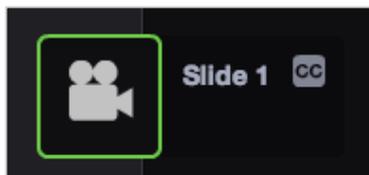
You can add captions to VoiceThread files within VoiceThread. You have to have editing rights to do so, so commenters can’t add captions to video or audio comments.

[From VoiceThread help:http://docs.voicethread.com/web-application/accessibility-web-application/closed-captioning/](http://docs.voicethread.com/web-application/accessibility-web-application/closed-captioning/)

How to add a caption file

Only the person who created a VoiceThread or someone who has editing rights for that VoiceThread may add captions to a video slide.

1. Navigate to the slide that contains the video.
2. Hover your mouse over the video icon on the left side of the page.
3. Click on the CC button in the drawer that slides out.



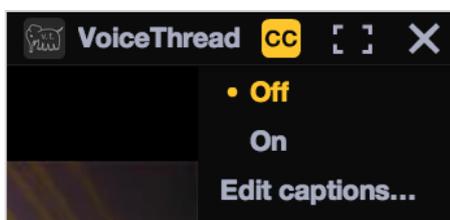
- 4.
5. Click "Add captions".
6. Select your caption file.
7. Click "OK".

File types accepted

- DFXP
- SRT
- SAMI
- SCC
- SBV

Viewing captions

Captions will always be displayed when you are viewing a VoiceThread slide at [VT Universal](#). If you're viewing the slide from the standard VoiceThread site, turn on closed captioning by clicking on the "CC" button in the top-right corner of the VoiceThread, and selecting "On".



Dictation

With **Dictation**, you can use your voice instead of typing text. Use these steps to turn Dictation on or off:

1. From the Apple menu, choose System Preferences
2. From the View menu, choose Dictation and Speech to view Dictation Preferences.
3. Click On to enable Dictation, or Off to disable it

Table 1. Do-it-Yourself (DIY) Closed Captioning Software Specifications

Tools	Auto Transcribe	MP3	MP4	Timecode & Sync	Languages	OS	Pros	Cons
YouTube. Free	X		X	X		Web	Cost free and easily available. All you need is a Google account. Easy to edit transcription and time codes with built in tools Downloadable transcripts in different formats (.vtt, .srt, .sbv) Transcripts with time codes can be downloaded and imported into other video streaming service, like Vimeo	Can take time to render the video. The larger the size of the video, the longer the render time. 80% transcription accuracy if standard English. The accuracy level decreases with the technical complexity of the language. Not reliable – inconsistent time taken to render files and in some instances failed to produce a transcript. Searchable even if unlisted or mad private.
Vimeo. Free and Paid versions			X			Web	Vimeo has a free and a paid version. Both versions support closed captioning	No transcribing service No auto transcribing Will need other tools to create closed captions
Dragon Naturally Speaking Premium	X	X			English, French, German, Italian, Spanish, Dutch, Japanese	WIN	Efficient and quick Trainable Supports multiple user profiles that can be shared on more than 1 computer.	WIN only
Camtasia Free 30-day trial. \$199	X		X	X		WIN	Create, sync, and export captions	WIN only

Built-in Dictation Tool for MAC	X					MAC	No set up required - it comes with OS	
Naturally Dictate	X		X			MAC		