

## Captioning Methods for Educational Videos

Dr. Rick Jerz



1

## Objectives

- Review the **purpose** of captions
- Review **technical** aspects
- Demonstrate and summarize various **alternatives**
- Demonstrate my **preferred** method
- Demonstrate captions in **Moodle** and **Canvas**
- Not an expert, but have experience
- You are an instructor or administrator wanting captions

2

## Purpose of Captions

- **Accessibility:**
  - For those with hearing disabilities
- For the educational **organization**
  - Required by law
- **Benefit all students**
  - Improve understanding
  - Improve engagement and retention
  - Helps with technical terms
  - ELS students
- **Benefit instructors**
  - A record of what was said
  - Direct students to specific points
  - Serves as starting point for future improvements

3

## Technical Terms

- **Closed** captions
  - Sidecar file
- **Open** captions
  - Burned into the video
- **Captions, subtitles** and **transcripts**

4

## Some Characteristics

- **Evaluation metrics:**
  - **Cost** (service or your time)
  - **Time** (production)
  - **Quality** (accuracy, formatting, alignment)
- **Educational videos:**
  - **Create** original
  - **Edit** existing (change words and timing)
  - **Revise** (delete/insert, move)

5

## Some Alternatives

- Use the computer OS (Windows 11 and Ventura)
- **Manually**
- **Internet** (websites)
- **Pay for** (Rev.com)
- **Software** (MovieCaptioner, Camtasia)
- **Video serving platforms** (YouTube and Vimeo)
  - Auto-generated captions
- **Adobe Premiere**
- **Scripted** and **unscripted** videos
- Focus on "closed-caption" sidecar file

6

## Windows and Mac OSs

- Use tools built into Windows or Mac
  - Free
  - The computer creates the captions
- Issues
  - Quality is **poor**
  - Captions **lag** voice
  - Captions should contain more than just words (birds chirping, soft-music, loud bang)
  - Cannot create a standalone transcript file
- Perhaps in the **future**

7

## Manual Captioning

- Two major types of caption files:
  1. .srt (~ 90%)
  2. .vtt (~ 10%)
- ASCII "text" files
  - Edit with any text editing or word-processing software
- Contents:
  - Words
  - Timecodes
- Type, cut/paste words
  - Possible, but very time consuming
- Create timecodes
  - Impractical

8

## Web-based Solutions

- Search for "free captioning services"

9

## Rev.com – "Pay For" Solution

- Currently **\$1.50 USD per minute**
- Reasonable **price**
- Quality meets education standards
- Great **editor**
  - Adjust words and timing, spell check, search, and more
- Rev.com uses a **person**, better than auto-generated captions
- A **script** can be uploaded for improved accuracy
- **Translations** to other languages
- Drawbacks
  - A revised video must be recaptioned, **pay again**
  - University-owned account didn't provide me the **editor**

10

## Captioning Software: MovieCaptioner

- Load movie
- While playing movie, manually type what is said
- Hit "Return" to capture the text and **timecode**
- Better than a "text" editor
- Somewhat slow, based upon your typing speed
- Supports many caption file formats
- Around \$100
- More economical than Rev.com?
  - What does your typist cost?

11

## Camtasia (TechSmith)

- Available for **PC** and **Mac** Provides captioning track
- You **manually type** words on the caption track
- PC-version provides **auto-generated** captions
- Able to **export** captions as SRT file
- Auto-generated voice-to-text should be trained
- Editing takes time
- Camtasia Suite (about **\$ 100 USD per yr.**)
  - Includes **Camtasia** (screen recordings) and **SnagIt** (screenshots)

12

## YouTube

- Free!
- Provides auto-generated captions
- Drawbacks
  1. Licensing issues
  2. Ads and irrelevant videos show
  3. Auto-generated captions may not meet educational quality standards
- Solutions
  - Find another video distribution platform
  - Embed YouTube videos
  - Edit the captions

13

## YouTube's Caption Editor

- Quite robust (like Rev.com)
- Spell check
- Search and replace
- Correct words
- Adjust timing
- You can export YouTube's captions as SRT, VTT, or SBV

14

## Vimeo

- Costs me around \$250/yr.
- **Reliable** video-serving platform
- You retain **ownership** of your videos
- Good control of user interface
- Auto-generated captions
- Editor for word correction
- Good quality
- Download/upload SRT files
- Videos can be embedded in LMS

15

## Vimeo's Regular Player - Features

- Includes **captions** and **transcripts**
- **Searchable** transcripts
- Chapter markers

16

## Adobe Premiere

- My recommended choice for captioning
- Timeline contains video assets and captions
- Can auto-generate **captions** and **transcripts**
- Higher **accuracy** than YouTube and Vimeo
- I use Premiere to caption Internet download videos
- Editing tools **superior**
  - Able to adjust **words** and **timing**
  - Offers find and replace, keyboard shortcuts, spell check
  - Timeline editing: ripple, rolling, trimming, slip, and split

17

## My Premiere Method

- Replace Premiere transcription with script text
- Begin with auto-generated transcription
- Insert **backtick** ` character at breakpoints
- Run MS Word macro to reformat the script
- Replace Premiere transcription segments with script segments
- Very accurate
- Faster than editing auto-generated captions
- Create mp4 and SRT files, upload to Vimeo

18

## Premiere Summary

- Premiere can create **open-captioned videos**
- Creative Cloud Subscription, **\$30 USD per month**
  - Includes Photoshop, After Effects, Acrobat, plus more
- No longer need Rev.com

19

## Captions in Moodle and Canvas

- Using YouTube or Vimeo, captions are **provided by the platform**
- Without a platform (i.e., a video and caption file)
  - **Moodle:** Insert Media tool
    - Point to video's URL
    - Upload a **VTT** file
  - **Canvas:** Insert, Media, upload video
    - Upload a **SRT** file

20

## Summary

- **Rev.com:** great pay-for solution
- **YouTube:** good free solution, except licensing
- **Adobe Premiere:** my preferred solution
- For additional resources, see



21