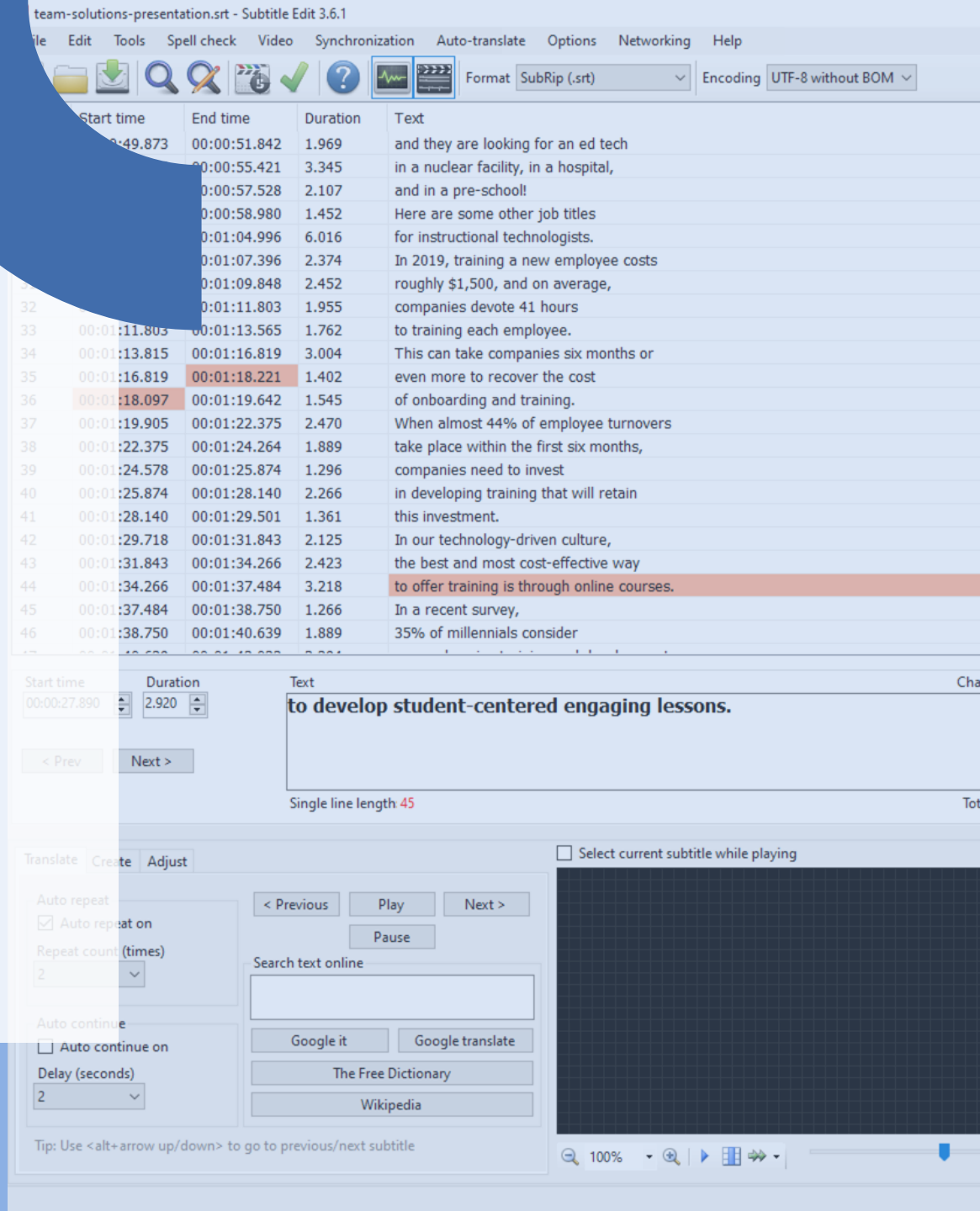
Closed Captioning Training Design Plan

Maria Elena Hernandez

September 2021

EDTC 6332 – Educational Technology Practicum



Needs Assessment

Many Texas State Technical College faculty and PBE instructional designers rely on automatically generated closed captions for instructional videos. These captions are often full of errors and do not offer the best readability for students.

Currently, the most accurate closed captions are created by people, not software. Staff should be trained to manually create closed caption files for videos.

Recommended Solution

A self-paced, web-based instructional unit will train TSTC staff how to create a closed captions file from a video's transcript.

Note: This training will cover the mechanics of the process. Best practices on how to format captions can be covered in a later training.

Instructional Goal

After completing this training, staff will be able to convert a video transcript into a closed captions (.srt) file.

Performance Objectives

After completing this training module, learners will be able to:

1. **Prepare text** for closed captions
2. **Add timings** to individual lines of text
3. **Save file** as an .srt
4. **Adjust timings** as needed

Assessment of Learning Outcomes:

Performance Objective 1	Assessment 1
Given a video transcript and access to free online tools, learners will be able to segment the transcript into individual lines of text with no more than 32 characters.	Learners will be provided the chunk of text below, as well as the link to the free online text tool mentioned in the module. They will need to break the text below into individual lines of no more than 32 characters. They will submit the completed task via a Google Form. American industries annually spend more than $100 billion on training... not more than 10 percent of these expenditures actually result in transfer to the job. Don't waste your money on ineffective training. Hire an educational technologist. Instructional Technologists design instruction, offer solutions, train, and provide support to improve work performance in the workplace. They use their talents and imagination to develop student-centered engaging lessons. Rubric: Script is broken into multiple lines. (5 points) Each new sentence in the submitted text begins a new line. (10 points) Submitted text is segmented into individual lines with 32 characters or less. (10 points)

Assessment of Learning Outcomes:

Performance Objective 2	Assessment 2
Given the free program Media Subtitler, learners will be able to add timings to individual lines of a video transcript using a checklist.	Learners will complete a quiz built into a Camtasia video. They will have the option to retry any questions answered incorrectly in order to continue with the video. Questions: • What menu option do you select to open a text file or a video file? • What Captioning Mode should be selected? • After you start playing the video, what button do you hold to add timing to a line of text? • When do you let go of the Apply button? • True or False: If you make a mistake while adding timings to a line, you must restart timings from the very first line.

Assessment of Learning Outcomes:

Performance Objective 3	Assessment 3
Given text and caption timings in the free program Media Subtitler, learners will be able to save the work as a .srt file without any errors.	Learners will complete a quiz built into a Camtasia video. They will have the option to retry any questions answered incorrectly in order to continue with the video. Questions: • What menu option do you select to save the file? • What is the next item to select to save the file? • What button do you click to save the file? • After choosing the name and file location, what button do you select next to save the file?

Assessment of Learning Outcomes:

Performance Objective 4	Assessment 4
Given an .srt file with captions that overlap or are too short, learners will adjust timings, using the free program Subtitle Edit.	Learners will complete a Google Forms quiz about adjusting timings in Subtitle Edit. Questions: • Which of the following screenshots shows two lines of captions are overlapping? • One of the lines in the screenshot below has too short of a duration, according to the program. Which line is it? • Where do you click on the program to see a waveform of the video's audio? • With the caption line selected, how can you change the duration of it on Subtitle Edit? • True or False: Subtitle Edit ONLY allows you to adjust caption timings.

Learner Characteristics

Intended Audience: Texas State Technical College PBE instructional designers

Education

Academic backgrounds ranging from associate's degree to doctorate

Accessibility Training

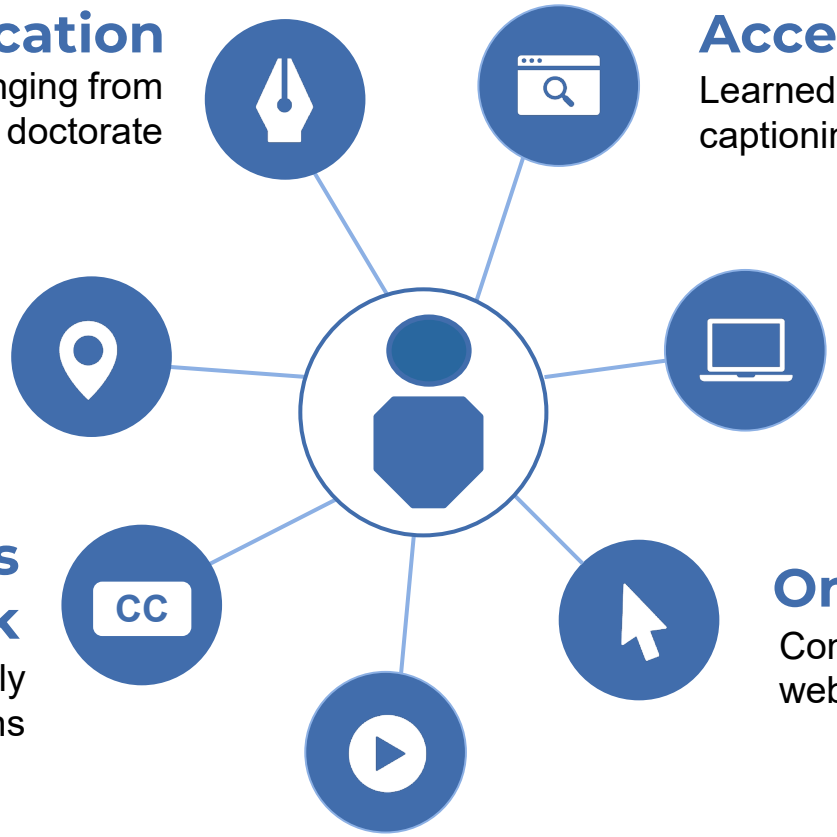
Learned about importance of closed captioning

Location

Work remotely on work-issued computers

Computer Skills

Knows how to install programs on a computer and access online tools



Some Previous Captioning Work

Experience adjusting automatically created closed captions

Online Learning Experience

Completed previous learning through web-based instruction

Work with Videos

Create or find instructional videos to include in courses, often using a video player's automatic caption generator, if available

Learning Context

Intended Instructional Setting

Instruction takes place online, but the physical environment for learners varies. TSTC PBE instructional designers work remotely, usually from their homes, with TSTC-issued computers.

Characteristics

Learners are developing a pilot project, so there's motivation to release a high-quality product. But as deadlines near, the time saved with automatically generated closed captions can become more appealing.

Resources

Notepad, Media Subtitler, Subtitle Edit, Gillmeister-Software online text tools (all free programs)

Constraints

This training applies to those with Windows-based computers, since the free programs used in the training are not available for Apple devices.

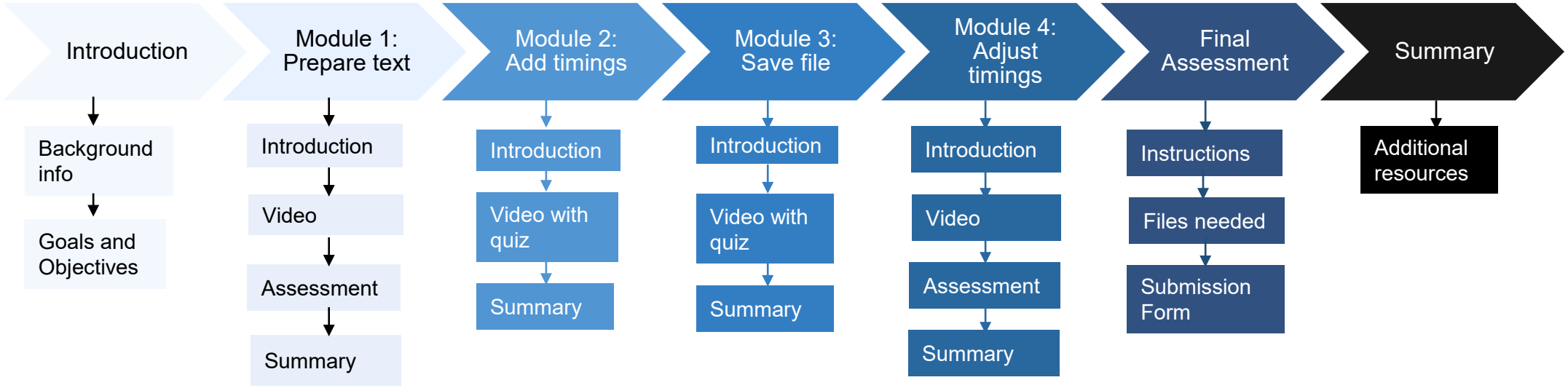
Training Module Outline

Introduction	1. Overview of training 2. Statement of goal and objectives
Presentation of Information	Topic 1: Preparing Text 1. Introduction 2. Video Tutorial 3. Assessment with submission via Google Forms 4. Summary
	Topic 2: Adding Timings 1. Introduction 2. Video tutorial with built-in questions 3. Summary
	Topic 3: Saving File 1. Introduction 2. Video tutorial with built-in questions 3. Summary
	Topic 4: Adjusting Timings 1. Introduction 2. Video tutorial 3. Google Forms quiz 4. Summary

Training Module Outline:

Final Assessment	1. Instructions 2. Files needed 3. Submission form
Summary	1. Summary text 2. Additional resources

Training Module Blueprint



Instructional Resources

Hardware

- Desktop or laptop computer with:
    - the Windows operating system
    - internet access
    - mouse or trackpad
    - an audio output learners can monitor, such as built-in speakers or a connection for external speakers or headphones/headset
    - the capability for the learner to install free programs on the computer
- Headphones or speakers to connect to the computer, if computer does not have a built-in speaker

Software

- Notepad (included in Microsoft Windows)
- DivXLand Media Subtitler (free downloadable program)
- Subtitle Edit (free downloadable program)

Formative Evaluation

A peer evaluation and one-to-one evaluation will be used to review the training module. A fellow educational technology graduate student and one of the TSTC PBE instructional designers will be asked to participate in these. The exact participants have not been identified at this time.

- Peer evaluation: The peer will be sent the link to the instructional unit, as well as a Google Forms link to collect feedback about the training.

- One-to-one evaluation: The evaluator will share their screen with me as they complete the instructional unit. I will observe the evaluator's actions, respond to any questions asked, ask for feedback when a module is completed, and, if needed, ask why a particular action was taken.

Summary

This self-paced, web-based instructional unit will train learners how to create a closed captions (.srt) file from a video transcript. The training is broken up into four parts: preparing the text for captions, adding timings to the text, saving the work as an .srt file, and adjusting timings, if needed.

The final assessment requires learners to create a closed captions file. With the ability to create their own closed caption files, TSTC PBE instructional designers will be able to improve the accessibility of instructional videos used for courses.