This section is intended to share the process we have developed for editing video for ELIXR case stories and the lessons we've learned during that process. This information is offered to assist others in the video editing process for ELIXR Case Stories and may be applicable to other educational video projects as well. Of course, editing video is a creative process and as such, there are a number of ways to approach the work. What is offered here is one way that has worked for us.

## Finding the story

Video editing is done in the service of telling the story of the case, so the process by which we find that story is an important context to start with. For us, finding a story that is compelling and important to tell is an ongoing process throughout case story development. It starts with the first conversation between the team members about what the topic the case will focus on and who the subject of the case will be. It continues with the first conversation with the subject.

We usually make contact with the case subject and have a preliminary conversation about what they are doing in their teaching that is the subject of the case. In this conversation, we try to get a sense of who they are as a person, what they have done with their teaching, what it has meant to them, and what it might mean to others. The question of "what is the important story to tell here" requires agreement among team members, and it is also something to be revisited at each stage of case story development to confirm or adjust as needed.

Getting agreement among the case story team on what story we want to tell can be a challenging task. This is because each person holds a personal vision of the case in their internal imagination and they may or may not be able to describe this to others. For us, a helpful strategy to expose these internal models was to Create artifacts that were concrete representations of the case. This helped clarify what each person thought was important about the case, and provided something tangible to be discussed, debated, and modified.

Activities we found useful in creating such artifacts were: developing interview questions, reviewing and discussing footage before editing, drafting introductory text for the case and the main story points, gathering support documents and/or resources for the case, developing a mock trailer for the case, and even developing an evaluation instrument for use of the case.

### The editing begins

Once the video has been shot, the editing can begin. There are many different ways to approach the process of editing. Below is a description of the methods that are working well for us.

The editing process starts with selecting segments from the raw footage to assemble into clips. We have experimented with two approaches to doing the segment selection: 1) Having the editor select primary and secondary segments and present these to the team, 2) having all members of the case story team participate in the segment selection process. Method 2 is much more time consuming and resource intensive then method 1, but gets group members more involved in the case development process.

Pursuing method 2 involved making DVD's with on screen timecode and distributing

them to group members. Then we asked them to select moments in the video where they felt "others have to see this, or hear this" and to write down the timecode for these segments. We also experimented with having the case subject review footage and select segments too. All segments were then posted to a web page for review by all team members, and a subsequent discussion was held. The goal of the discussion was to understand, from each person's point of view, the strengths and weaknesses of various segments relative to the story we were trying to tell. The video editor and story editor would then use this input to create draft clips for the case..

One of the problems with this whole group approach was that sometimes team members did not have time to review all the raw footage. Another was that sometimes incomplete notes were made about segments that were identified as important, making it very time consuming or impossible to extract the segments for viewing by the group.

In retrospect, we think it is probably best when trying to get group input to view the footage together, stopping when anyone has a comment to make and have someone taking notes on the segments and their importance to team members. This may not always be practical, but when it is possible, we believe it is the best way to capture the richness and diversity of everyone's points of view.

The other solution to these group process challenges is to use method 1, and just let the video editor select segments for the group to review. This can be much more efficient, but relies on the media professional/storyteller to understand what is important to the team and to select the elements that will tell that story.

One other note about selecting moments from the raw footage: research shows that people's learning is supported by seeing and hearing practitioners talk about what did NOT work as much as what did work. So it is very important to gather footage and include footage that includes what the practitioner has learned about what NOT to do, or what to stay away from. Helping the subject of the case understand the value of this information will make them more likely to be willing to share it and have it included in the case. We believe that including both "positive" and "negative" experience also gives greater credibility to the case with viewers, and that this kind of vulnerability on the part of the subject makes it more likely that the viewers will be reflective about their own teaching practices.

## Aligning the clips with the story elements

Once the most compelling moments have been selected out of the raw footage we assemble them into clips that align with the main points to be told in the story. There may also be strong moments in the footage that don't fit the story as we have conceived it. This is opportunity to re-think the story, or to find a way to include the elements in some other way. The principle at work here is to build the case out of the most compelling material we have and not be constrained by our original concept of what it should be.

# Collapsing the narrative of a clip for efficiency

The process of assembling a clip usually starts with taking the relevant interview segments from the raw footage and cutting them together to construct a narrative for a particular story point. As we do this, we collapse together points being made by the subject, regardless of the jump-cutting that may needed to accomplish this. This cutting helps to focus on the specific story point to be made and collapses the footage into an efficient narrative. However, we are cautious when doing this editing not to change the meaning of what the subject said, or or to totally remove the character of the person's

### speech,

We aim to make clips 1 to 3 minutes long for each story point if the clip only contains a single person. If a clip contains multiple people, we may stretch this time to 5 or 6 minutes. These lengths are only a rule of thumb however. In the end, we are guided by how long the clip remains compelling, erring on the side of brevity. If a clip exceeds the rule of thumb significantly, we consider breaking it into two clips. This approach has been validated by consistent feedback from users that they like the length of the videos, and that they are grateful for the efficiency of the storytelling. Everyone's time is precious.

# Reviewing clips and getting feedback from the project team

Once the clips have been assembled, and before we proceed with illustrating them with classroom and other visuals, we circulate the clips to get feedback from the case story team. Do the clips make sense? Do they tell the story we want to tell? What's missing that's important? Are the clips too long or too short? We use feedback from these questions to make adjustments in the clips.

# Illustrating the clip with b-roll footage

After adjustments are made to the rough assembly clips illustrating the ideas expressed in the clips begins. We do this by using footage from the classroom or other settings. The goals in adding these visuals are to 1) actually demonstrate what is being described in the narration; See not only what the instructor is doing, but how they are doing it. 2) provide a visual context so the viewer can better imagine what is being described; and/or 3) see how the students participate in and respond to what the instructor is doing. We do this with a mixture of visuals over the voice of the instructor's interview, and segments where we fully enter the classroom and experience what is happening there. This rich detail of seeing and hearing the way an instructor does something, how students respond, and how they interact together is what video can provide that still images or text cannot do as completely.

### Review and revision of clips

As the clips are illustrated, we pass them on to team members for another round of feedback. We do this by posting clips to a threaded discussion page on the internet. Team members can view the clips and post feedback in the discussion area, or send feedback by email. Conference calls have also been used to get feedback on clips.

## Viewing the clips in context - draft assembly of the Case

Something that was a surprise to us was how much of a difference viewing the clips in the context of the Pachyderm case story structure made for team members. How the clips came together to tell a story, and how each clip contributed to, or detracted from the story seemed to become much clearer for team members when viewing the clips in the context of Pachyderm case story structure. For this reason, as soon as we have completed drafts of several clips for a case, we will put together a Pachyderm prototype of the case and put whatever pictures, video, and text we have into it. Pictures can be easily grabbed from the draft videos, and text can be roughed in with a few sentences or drawn from draft documents. After this prototype is "published" from within Pachyderm the url is passed to team members for review and comment.

Gathering still images from the clips

Relationship of the videos with the Case text Text introduces video? Text orients the viewer to the page?

Text tells a parallel story? Text sets the story element in a wider teaching context? Text is the authors personal narrative? Other?

Some Stylistic Choices we've made - telling the story and direct experience are primary 1st person narratives - interviews and text
Length of clips
No fades
No titles
No narration
Live sound along with interview
Boosting audio or captions for hard to hear audio
Labels for segments
Time-stamping clips
Identifying speakers - Lower 1/3 supers
Watermarking clips?

Some technical stuff:
Full rez vs low rez editing
Compression of clips - review vs distribution
Captioning of clips
Audio and video level normalization