

Ten Tips for Creating a High-Quality PAEMST Application Video

By Robert Schoen and Zachary Champagne

The video component is a very important part of the application. To help you create the best possible video, we offer the following tips. These tips are based on our years of experience with the PAEMST. We hope they will be beneficial.

1. **Videotape yourself several times to get over the nervousness you may feel.** You may be nervous the first time (or first few times) that you videotape your teaching. Your students might be curious about the camera and may also feel self-conscious the first time or two. If you have the same group of students every day, consider recording multiple days in a row. If you teach multiple classes, you may want to record the same lesson structure with a few different groups. It is even better if you can videotape and then watch and discuss the video with a trusted colleague.
2. **Consider using a tripod and have a partner run the camera.** A moving camera can make the viewer nauseous, and you don't want the people on the selection committee feeling that way while they watch you teaching. The video should capture students sharing their thinking with other students and thinking deeply about the mathematics (not just practicing procedures). Capturing this on an unedited video may involve taking the camera off the tripod and moving it to where students are working or talking at times.
3. **Ask the camera operator to NOT just follow the teacher the whole time.** This may be the single most important suggestion. The video should include the teacher, but only to showcase the role the teacher plays in the classroom. The committee wants to see students learning and engaging with challenging (to them) material. Try to capture students working, thinking, and discussing mathematics (or science).
4. **Make the written component and the video component of the application coherent.** Selection committee members get confused (and a bit annoyed) when the written portion discusses how students best learn to multiply four-digit numbers and then the video is a problem-solving exercise in proportional reasoning. Include worksheets, a lesson plan, and some information about what has been done with the students before the lesson and what will be done afterwards so that the selection committee members may understand how the lesson fits in the bigger picture.
5. **Include student work from the video as supplementary materials in the application packet.** This can be copies of worksheets, pictures of posters, etc. This is particularly important if the student work is discussed during the video. The reviewers want to be able to see what students are discussing and what is written on the paper. If possible, provide students with markers to use rather than pencils; their writing may be visible on camera if they use markers, but it is difficult to capture writing on video when it is in pencil.
6. **Consider adding a teacher-reflection component (orally, to the camera) on the videotaped lesson as a supplemental video section.** Don't be afraid to offer constructive criticism of your video in your written application or in the supplementary video portion. Continual improvement and reflective practice are virtues. If you embody these qualities, then show it.
7. **Make more than one videotape and select the most interesting one.** Make videos of several strong lessons and then do the written part of the application. Do not take the time to write the packet and

then try to fit a video to it. Consider teaching the lesson several times to different classes. Reflect upon the improvements you made through this process in the written portion of the application.

8. **No matter what happens, do not stop the video recorder in the middle of the lesson.** A video clip that stops and re-starts will be disqualified from consideration. We recommend you tape a longer lesson and then use the most interesting 30-minute segment. You can use the written part of the application packet to explain parts of the lesson that did not make it to the video. If the recorder accidentally stops in the middle of the lesson, then you need to plan another lesson or use another unedited, 30-minute segment. *Make sure the camera battery is charged and will last the duration of the lesson.*
9. **Take strides to maximize audio quality.** Audio is often harder to capture than video, and poor audio quality can be frustrating to watch. There are several ways to get good audio. Consider putting a lapel mic on the teacher and placing additional microphones in the room to capture students talking. This means that the audio will have to be edited back together. (*Note.* You can splice multiple audio tracks together to improve the sound quality, but *you cannot edit the video* track. The video must be a nonstop, unedited track shot from a single camera and lasting 30 minutes or less.) This can involve some skill with video editing, but the end product is worth it. If it is not possible for you to capture audio from several different microphones and synchronize them with the video track, then there are two important things to consider. First, try to minimize background noise. This might mean using foam manipulatives rather than plastic ones, for example. Second, the camera operator should get close to students while they are discussing so that their voices can be heard. If you are using the microphone on the camera that is mounted on the tripod, do some tests to see if the tripod creaks or makes noises. It is amazing how loud and distracting those can be on the audio recording. If possible, ask the front office to refrain from interrupting via intercom or phone. Of course, video quality is also important, so do some trials with the camera and lighting to make sure that you optimize the quality of the end product. This can complement the work you do to maximize the audio quality.
10. **Request a mentor through the paemst.org website.** Alternately, the state coordinator or the current president of the Florida Mathematics Presidential Award Awardees (FMPPA²) may be able to mentor you through the application process or put you in contact with a mentor. There also may be equipment (e.g., audio equipment, video equipment, software for editing) available to borrow.

We wish you the very best of luck with your application!

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