

# Hybrid PACE Test

21 September 2020

## ATTENDANCE

Zoom Host	Nelson Cain
Presenter	Chris Alexander
In-Class member	John Estill
Remote member	Mark England
Class Leader	Russ Simmonds
Recorder	David Johnson
ZoomCamera1	Jim Alexander
Observer	Thom Blake
Observer	Floy Rorie

## OBSERVATIONS

- We encountered a latency issue on Script1 when Chris tried to run a YouTube video. The audio was not synchronized with the video, with at least a 1-second latency. This made the video unacceptable. We substituted another computer which resulted in acceptable video performance.
- Sometimes Remote users could not hear In-Class people. We were able to overcome that by “proper” use of the wireless handheld microphone: the mic needs to be less than 12” from the person speaking, the speaker needs to enunciate, and the mic should not be moving.
- The camera on the Cart #3 computer is not operating properly. Nelson tried several other video apps besides Zoom, and the camera image would freeze instead of showing continuous movement. We had to disable that camera in Zoom, and were not able to use that camera to show an In-Class presenter to Remote users. We substituted a phone camera (Jim Alexander as ZoomCamera1) to spotlight the presenter for Remote users. If appropriate, the PACE class (via Thom Blake) is willing to obtain a USB camera that could enhance Hybrid sessions.
- When the Zoom Host is Remote, there needs to be another In-Class person to perform Zoom actions if the presenter is In-Class. This person could also walk the handheld mic when In-Class people want to speak (for questions to the presenter, for the Sharing Circle, etc.). From a Zoom perspective, this person needs to be a Co-Host. Perhaps a title for this role might be “Cart Host”.
- We should allow additional time to get the room set-up before class. We noticed that the laptop first needed to install a number of Microsoft updates before we could get started. The Zoom client on the laptop then needed to be downloaded. We may not always have the same cart in the room, so we should be prepared to deal with that variable.

- Remote participants are able to hear the discussion in class exclusively through the laptop microphone. The hand-held microphone simply amplifies the person's voice through the overhead speakers which is then picked up by the laptop microphone.
- Remote participants are able to be heard in the classroom through the speakers on the cart. These speakers need to be turned on in order for remote participants to be heard in the classroom.
- When the Zoom host switches from Gallery View to Speaker View, audio from the classroom is picked up by the PC speaker so the PC camera becomes the "active" Speaker. Once the camera issue is fixed on the laptop, this view will display a fixed wide view of the classroom to remote participants (assuming the PC lid is aligned properly for a good view). The Zoom host will need to Spotlight the remote Class Leader and Presenter, as well as the in-room camera as needed in the room.
- If the person recording the presentation is in class, there is an option to record the session on the laptop or in the Zoom cloud. If recording to the laptop, allow time after class for Zoom to convert the file to MP4 format, which can then be transferred to an external drive. Then be sure to erase the files (video and chat) from the laptop.

## **IDEAS**

- We think we need another Zoom test (the “Russ test”) to be held on a Sunday at 11am, after a PACE session has ended. At that time, and in our PACE classroom, we would be able to experience a similar network loading that a Hybrid PACE class would have. There would also be one or more Remote PACE members participating to give feedback on video and audio performance.
- We should also test, perhaps in the same session as the “Russ test”, using a mobile phone hot spot. This could help reduce latency by using mobile phone data rather than WiFi.
- We should also measure network performance during these tests, and before and after as well. There are free network analysis tools that (unlike most “network speed tests”) measure performance continuously.
- It is not clear how we should handle Circle Sharing in a Hybrid environment. Should Remote users share first, then In-Class? Is the mic passed around In-Class, or does someone walk the mic around? If passed around, how to sanitize the mic?
- We probably need some “How To” instructions, primarily for Zoom Host, Cart Host, and ZoomCameras, on how to conduct Hybrid PACE sessions. This might be analogous to what Russ did for the Audio system. Perhaps a chapter in the “How To” guide might cover In-Class Camera Operators.
- There should be 3 attachments to this email:
  - ZoomVideoSettings.jpg      which might reduce Zoom resource usage
  - ActionItems.xlsx
  - VideoInstructions.jpg      from Floy Rorie, primarily to present YouTube videos