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Pearson



# **An Introduction to Producing Mathematics Instructional Videos: Tools and Tricks Part 1**



## **Clayton "Clay" Kitchings**

Assistant Professor of Mathematics  
University of North Georgia - Oconee  
[Clayton.kitchings@ung.edu](mailto:Clayton.kitchings@ung.edu)



## **Thomas Hartfield**

Associate Professor of Mathematics  
University of North Georgia - Gainesville  
[Thomas.Hartfield@ung.edu](mailto:Thomas.Hartfield@ung.edu)

## Introductions

- Clay Kitchings – Part 1
- Thomas Hartfield – Part 2

## Purpose

- Our purpose is to provide you with a very basic introduction to creating mathematics instructional videos for your students

## Structure

- I will provide some personal examples and a few product examples
- Note: Product references are our own opinions. No credit is given to us for product mentions.
- Thomas will follow up with enhanced, helpful best-practices to help take your videos to the next level

## Clay's Personal Examples

- Instructional videos since 2013; Media since 1995
- Started teaching high school in 2002
- Live class lecture recordings
- After-class supplemental videos
- Virtual office hours via Skype and Microsoft Teams

## The Necessity of Video Today

- Interruptions and closures can force campuses to postpone face-to-face instruction.
- Video instruction allows us to maintain and/or improve engagement with our students
- Zoom, WebEx, GoToMeeting, Blackboard Collaborate Ultra (LMS add-on), GoBoard, Microsoft Teams, and Skype



## What is Required?

- A writing tablet
- Writing software (or website)
- Screen-capturing software
- Audio acquisition tool (microphone)

## Writing Tablet

- Makes writing easier
- 30-45-minute learning curve
- I use an inexpensive Monoprice writing tablet ([www.monoprice.com](http://www.monoprice.com), or retailer such as Amazon); shop around for others
- Tablet functions like mouse when pen touches surface of tablet

## Writing Software

- Electronic “surface” on which to display hand-written text

### Free examples

- GoBoard.com
- Microsoft Teams
- Other free virtual whiteboards exist

## Writing Software

My favorite: Smart Notebook

- Clean interface
- Pre-plan slides for presentation
- Screen-capture photos or text
- Basic version is free (with watermark)

## Writing Software

- Adobe Acrobat
- Microsoft Word
- PowerPoint
  - Write while “viewing” slide show or from editing screen

## Screen-Capturing Software

- Camtasia
  - More expensive; more editing
- Snagit – less expensive (temporarily free through June 2020)

## Screen-Capturing Software

- Free Options
  - Skype (has recording function and you can “present” your desktop, even if no one else is in the meeting)
  - Microsoft Teams (quickly becoming quite popular); available on all devices
  - Select audio/video inputs carefully

## Online Meetings

- Zoom
- WebEx
- GoToMeeting



## Cameras

- I always remind students to disable their cameras to increase their comfort level.
- I recommend you disable your camera as well for the instructional video.

## Audio Acquisition Tool (Microphone)

More expensive XLR Microphones require an audio interface

- Shure SM7b, Rode Procaster, Rode Podmic, Shure SM58
- Interfaces: Focusrite Scarlett; Behringer U-Phoria; Zoom H1n/H4n/H5/H6; Zoom U22/U44; Tascam DR-40X/DR-05X
- Position microphone close to your mouth

# Summary

Four Components

Start Somewhere

Give Yourself Grace

Your Students Will Appreciate the Help!

## Part 2: Thomas Hartfield

Please stay tuned – you will NOT want to miss Thomas' Hartfield's extension of this presentation! You will learn tricks for moving beyond entry-level instructional video production.

## Mobile App Session Survey

- 1) Find the session by using the search field
- 2) Click on session and locate session survey
- 3) Complete quick survey

**Your feedback is  
important to us...  
THANK YOU!**

ALWAYS LEARNING