Developing a Cohesive Online & In-School Education Experience

AST 2022

October 28, 2022

Hello!

My name is Matthew Ngo

B.Sc., B.Ed., M.Ed. | Teacher at Citadel High School

www.mrngolearning.com | mngo@hrce.ca

A little about me

- ✓ 13th year within HRCE | Science and Mathematics focused
- ✓ Thesis: *"Grit and student success in a high school physics classroom"* (2022?) St. Francis Xavier University
- ✓ Master of Education in Leadership and Administration (2017; St. FX)
- ✓ Master of Education in Curriculum and Instruction (2014; St. FX)
- ✓ Bachelor of Education in Secondary Education (2009; St. FX)
- ✓ Bachelor of Science in Physics and Mathematics (2007; Dalhousie)

Instructions for using plickers

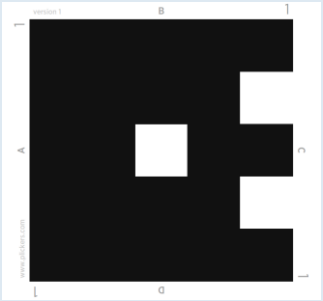
USING PLICKERS

Please obtain a Plicker card. Each card has an identifier on the top corner. Please do not share that number to anyone.

When responding to the question, hold up the card with the chosen letter pointed upwards

PLICKER CARDS

The Plicker cards can be downloaded for free



The Plickers application can be downloaded on iOS and Android Devices
www.plickers.com | You'll need a PC and handheld device; both connected to WI-FI

In a few moments, you will be asked several questions within the group setting

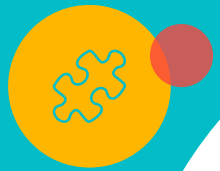
Plickers is an excellent tool to help inform teaching practices. Additionally, it helps support formative assessment practices!

[Watch 1Plickers Video]

Today's Agenda:

Today's Workshop Agenda

1. Setting the Foundation for our Learning: Ground Rules
2. Setting the Story: COVID-19 and the Beginning of the Pandemic (Online Ed.)
3. Developing Video Podcasts: Techniques, Strategies, and Rationale
4. The Use of Google Classroom: Enhancing Inclusion and Providing Equitable Access to Education
5. Wider Audience: What Worked For You and What Would You Like to Share?
6. Your Own Practice: Time Allotted for Personal Reflection and Collection of Thoughts



1.
Setting the Ground Rules

What can we live with?

2. Setting the Story: COVID-19 and the Beginning of the Pandemic (Online Education)

Imagine our teaching lives prior to the pandemic compared to now.

ATLANTIC | News

Maritime schools closed as provinces work to limit spread of COVID-19

Andrea Jerrett CTVNewsAtlantic.ca Digital Producer
@AJerrettCTV | Contact

Published Monday, March 16, 2020 11:09AM ADT
Last Updated Monday, March 16, 2020 11:41AM ADT

Nova Scotia

Nova Scotia school closures extended to May 1 due to COVID-19

Exams will be cancelled, planned school trips won't be happening

CBC News · Posted: Mar 30, 2020 1:41 PM AT | Last Updated: March 30, 2020

My last normal photo

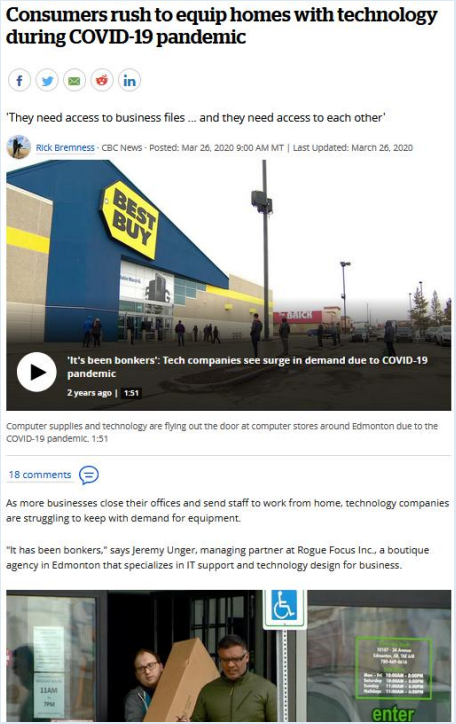
2. Setting the Story: COVID-19 and the Beginning of the Pandemic (Online Education)

Sunday, March 15, 2020
Day Before March Break

"It became clear that due to the spread of COVID-19 that we would likely be online. What do I do to maintain normalcy for students?"

NOTE TO SELF:

- Buy webcam
- Buy whiteboards
- Buy Hard Drive



Consumers rush to equip homes with technology during COVID-19 pandemic

'They need access to business files ... and they need access to each other'

Rick Bremness · CBC News · Posted: Mar 26, 2020 9:00 AM MT | Last Updated: March 26, 2020

'It's been bonkers': Tech companies see surge in demand due to COVID-19 pandemic
2 years ago | 1:51

Computer supplies and technology are flying out the door at computer stores around Edmonton due to the COVID-19 pandemic. 1:51

18 comments

As more businesses close their offices and send staff to work from home, technology companies are struggling to keep with demand for equipment.

"It has been bonkers," says Jeremy Unger, managing partner at Rogue Focus Inc., a boutique agency in Edmonton that specializes in IT support and technology design for business.

To create normalcy, I ran online education similarly to how St. FX offers online education

3. Developing Video Podcasts

How do you incorporate video podcasts into your own teaching practice?

[Watch 2PodcastExample Video – Sound is Muted!]

3. Developing Video Podcasts for your Own Context

Review of Major Concepts

You can do a video recording of major examples done in class. That way, students who miss class or require review have another avenue to review.

Pre- or Post-Lab Activities

In my case, instead of repeating instructions on how to graph using Google Sheets, I recorded step-by-step instruction videos to help guide students. It helps develop self-learning and independence.

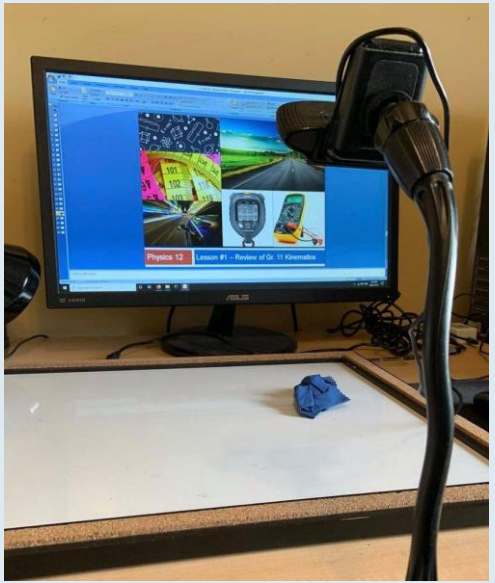
Sharing Video Messages to Parents and Guardians

I use it to convey important information to parents and guardians. That way, they are informed of certain classroom events and practices.

3. Developing Video Podcasts for your Own Context

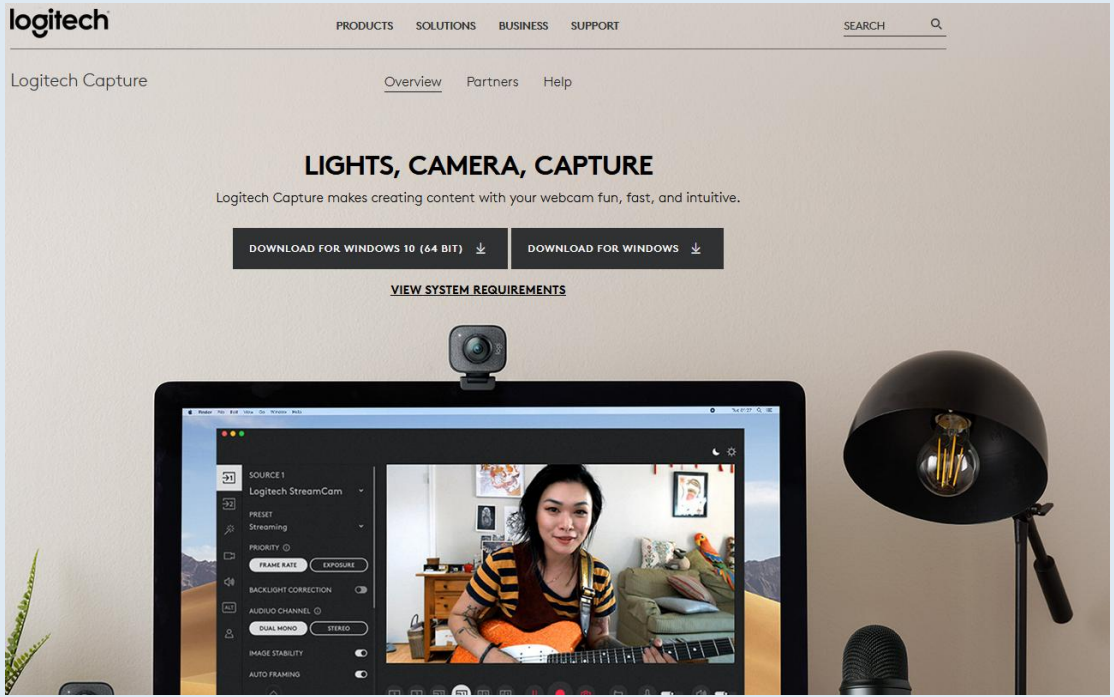
Recording Video Podcasts

Tip: Avoid recording live videos with an audience. I tend to record and edit/clip. That way, your videos can be used again for other circumstances



Equipment Utilized: Logitech C922 Pro Webcam. You can use others but for the purposes of this presentation, I'll be sharing my experiences using Logitech equipment. A 'streamer' webcam is highly advised.

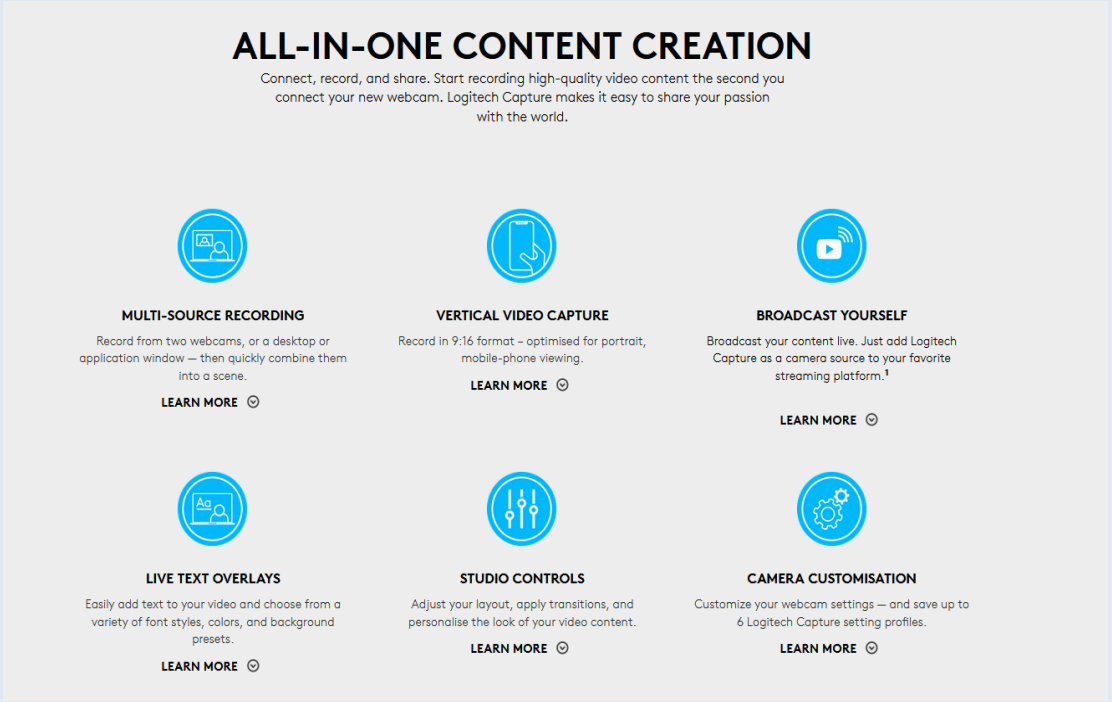
3. Developing Video Podcasts for your Own Context



Compatible Webcams from Logitech: C920, C920s, 1080p pro, C922, C922X, C930e, C930s, StreamCam, StreamCam+, BRIO4k, BRIO Stream

Depending on 4K, 1080p, or 720p recording, a dedicated GPU will be needed. I hooked my webcam to my work PC and it didn't produce the high quality video I wanted. Logitech provides recommendations here: https://support.logi.com/hc/en-ca/articles/360060226873

3. Developing Video Podcasts for your Own Context

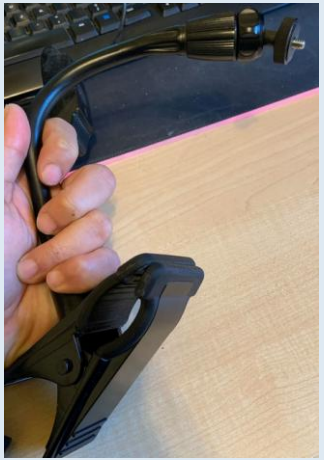


Compatible Webcams from Logitech: C920, C920s, 1080p pro, C922, C922X, C930e, C930s, StreamCam, StreamCam+, BRIO4k, BRIO Stream

Recommendation: Do not record videos onto your SSD

The SSD on your computer has a certain read/write amount before it is not reliable. My biggest advice is to have all videos record on a standard HDD. That way, you can reduce wear-and-tear on your devices.

3. Developing Video Podcasts for your Own Context



Recommendation #1: Ensure your Webcam Has "Camera Stand Threads"
What you are seeing is a "Smatree Adjustable Jaws Flex Clamp Mount with 13.4" Gooseneck Extension." It allows me to clamp the Webcam to my desk when recording video focused on the desk whiteboard or notes on paper

Recommendation #2: Buying a Dedicated Microphone with Diffuser
This will ensure higher sound quality in your videos. Last year I bought this and all my videos have a much more professional feel to it. Buy it on sale (usually during the holidays)

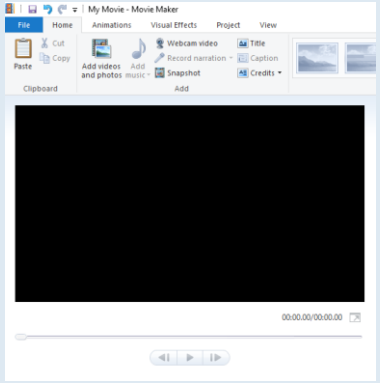
Cost of the Stand:
Roughly about $15-20.

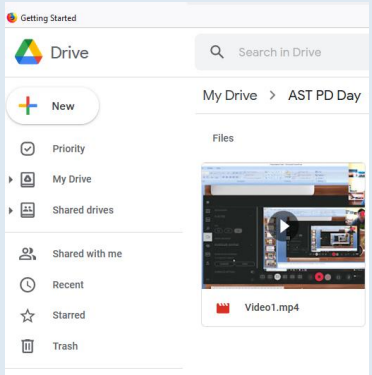
Cost of the Mic:
As low as $80 but rises substantially. Mine was $120 (on sale).

3. Developing Video Podcasts for your Own Context

Editing Videos

There are many programs and tools (free and paid) that allow you to edit the videos. The easiest (and free) one is Windows Live Movie Maker. Feel free to experiment on other tools.





Windows Live Movie Maker
A copy of the program can be found on my Google Classroom (see QR code on the front)

Reinforcing Major Concepts

At the same time, you're not constantly repeating yourself.

Improve Equitable Access to Learning

Not all students have financial means to obtain tutors.

EAL students can re-watch or use translation software for the videos.

Enhance Inclusive Practices

Engaging parents and guardians by showing them your support structures.

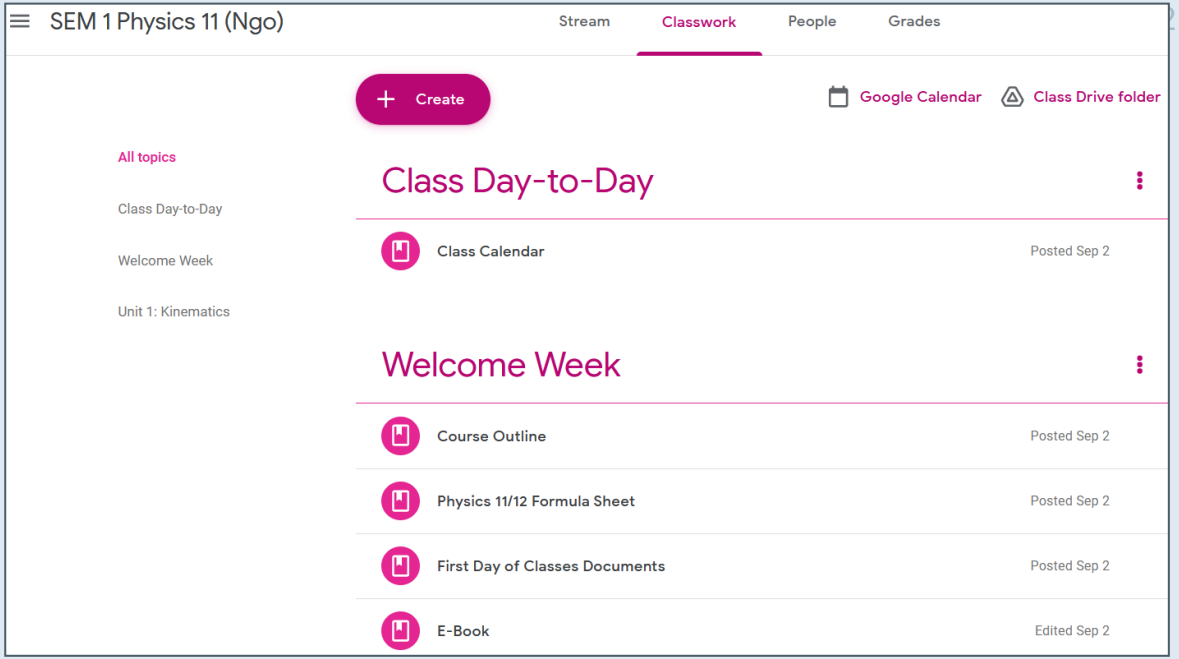
Questions?

Let’s take a few moments to reflect and collect our thoughts before moving on.

4. Using Google Classroom

How do you enhance the cohesion between school and online?

3. Using Google Classroom to Enhance Inclusion and Providing Equitable Access to Education



Rationale:
By placing all these resources online, students, parents, and guardians can access your materials. Additionally, emphasis is placed on the student to take responsibility for learn learning.
I believe there is a PD workshop being offered by someone demonstrating more advanced techniques

3. Using Google Classroom to Enhance Inclusion and Providing Equitable Access to Education

What am I using it for?

Class Notes

I'm not posting the entirety of the whiteboard notes; only the major headings and some texts.

Solution Keys

Solution keys to all practice problems are placed for students to check their ongoing work.

Link to Video Podcasts

All video podcasts are placed online for access. All video podcasts have titles that are coded to lesson titles.

Pre/Post Lab Work

Graphing or follow-up questions are posted to increase activity and normalize usage.

Question & Answers

A forum or location to have inquiry-based questions answered.

Adaptations

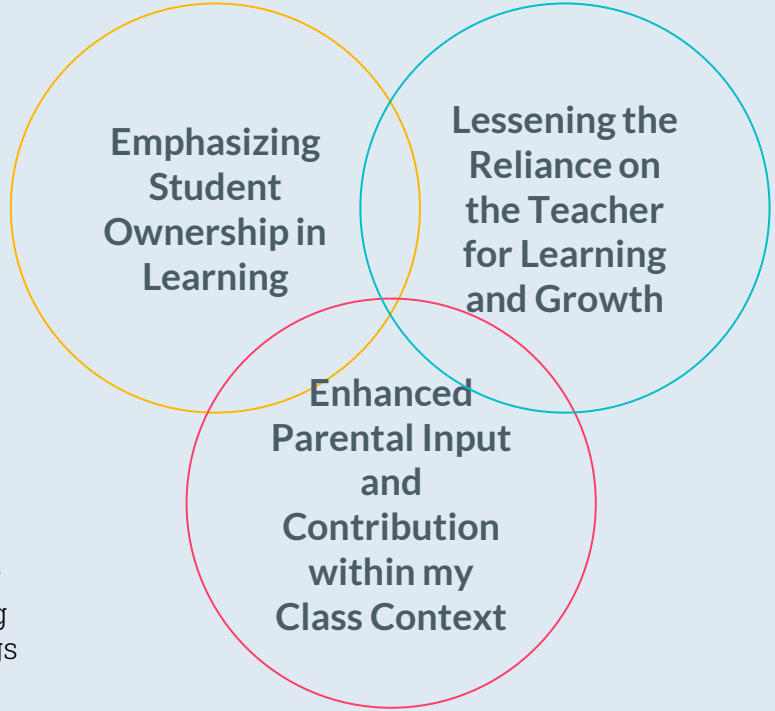
Providing resources for students and parents to have access to class materials.

Question to the Audience: Google Classroom has many gadgets and tools. What are you using it for? Would you like to share how you're using Google Classroom within your practice?

5. Wider Audience

What worked for you and what would you like to share?

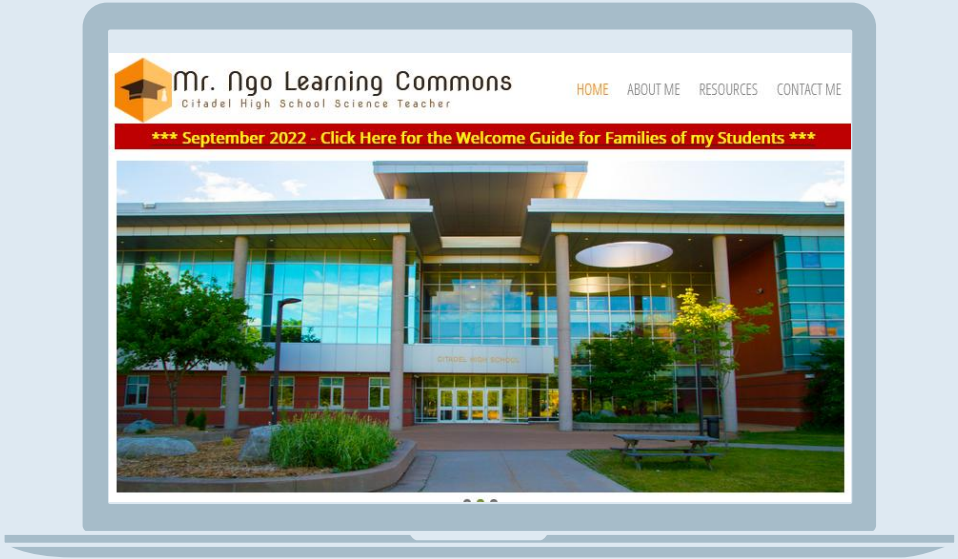
5. How This Process Worked for Me



My Biggest Advice: My post-pandemic teaching practice is constantly evolving. If you're starting off with this process, do not do all of these things all at once. Take small steps each year until you feel comfortable. What works for me may not work for you.

Reaching Out

If you have any questions or need help setting this process up, feel free to reach out to me



My Web Site: www.mrngolearning.com
My Email: mngo@hrce.ca

QR Code: To access files relevant to this workshop

Thanks!

Any questions?

Special thanks to NSTU's Association of Science Teachers for the invitation to present at today's workshop.

Remainder of Time: You can use this time to reflect on the PD and review links and resources.