

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

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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)
- 
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Instructions for using



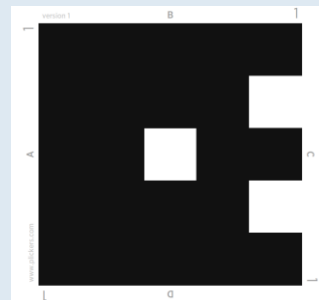
USING PLICKERS

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





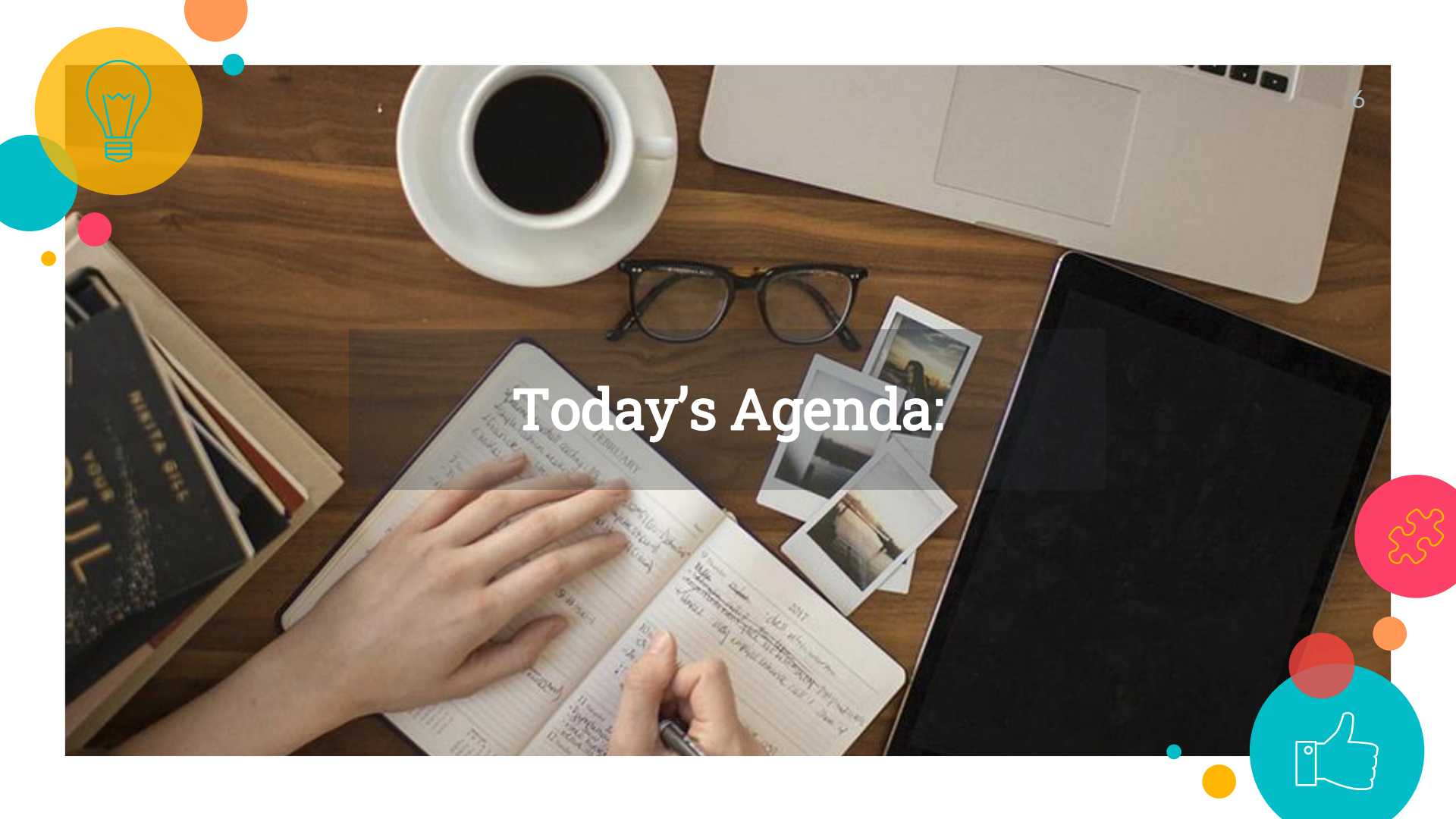
Plickers is an excellent tool to help inform teaching practices. Additionally, it helps support formative assessment practices!



[Watch 1Plickers Video]



Today's Agenda:





Today's Workshop Agenda

Setting the Foundation
for our Learning:
Ground Rules

1

Developing Video
Podcasts:
Techniques, Strategies,
and Rationale

3

Wider Audience:
What Worked For You
and What Would You
Like to Share?

5

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

2

The Use of Google
Classroom:
Enhancing Inclusion and
Providing Equitable
Access to Education

4

Your Own Practice:
Time Allotted for
Personal Reflection and
Collection of Thoughts

6





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

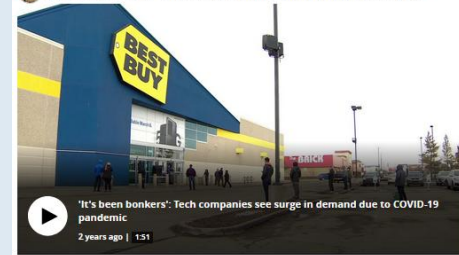
To create normalcy, I ran online education similarly to how St. FX offers online education

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



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.





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



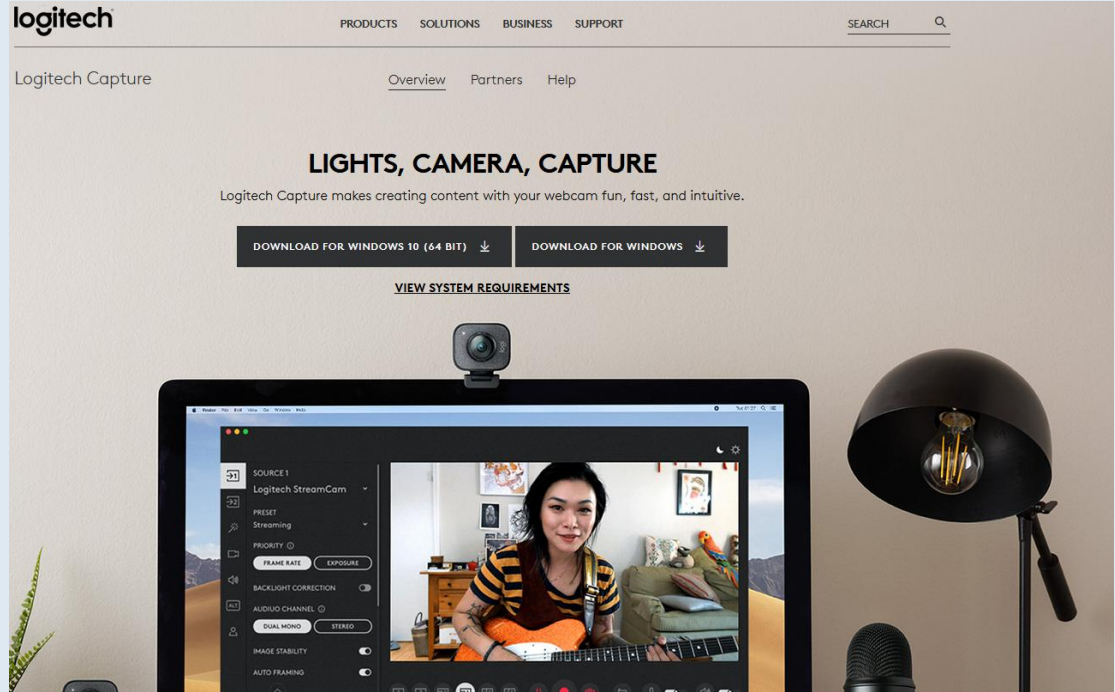
Equipment Utilized: Logitech C922 Pro Webcam. You can use others but for the purposes of this presentation, I'll be sharing my experiences using Logitech equipment. A 'streamer' webcam is highly advised.



3. Developing Video Podcasts for your Own Context



Compatible Webcams from Logitech: C920, C920s, 1080p pro, C922, C922X, C930e, C930s, StreamCam, StreamCam+, BR104k, BR10 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+, BR104k, BR10 Stream

ALL-IN-ONE CONTENT CREATION

Connect, record, and share. Start recording high-quality video content the second you connect your new webcam. Logitech Capture makes it easy to share your passion with the world.



MULTI-SOURCE RECORDING

Record from two webcams, or a desktop or application window — then quickly combine them into a scene.

[LEARN MORE](#)



VERTICAL VIDEO CAPTURE

Record in 9:16 format — optimised for portrait, mobile-phone viewing.

[LEARN MORE](#)



BROADCAST YOURSELF

Broadcast your content live. Just add Logitech Capture as a camera source to your favorite streaming platform.¹

[LEARN MORE](#)



LIVE TEXT OVERLAYS

Easily add text to your video and choose from a variety of font styles, colors, and background presets.

[LEARN MORE](#)



STUDIO CONTROLS

Adjust your layout, apply transitions, and personalise the look of your video content.

[LEARN MORE](#)



CAMERA CUSTOMISATION

Customize your webcam settings — and save up to 6 Logitech Capture setting profiles.

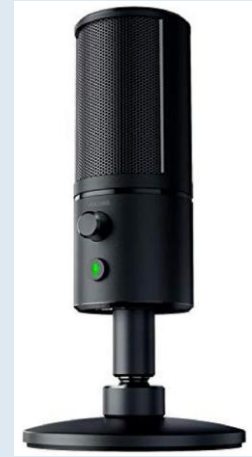
[LEARN MORE](#)

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



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

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

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

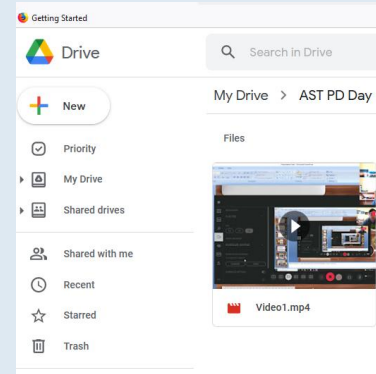
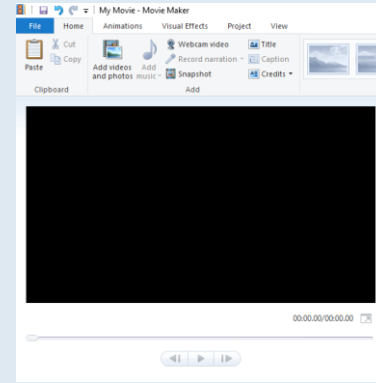
This will ensure higher sound quality in your videos. Last year I bought this and all my videos have a much more professional feel to it. Buy it on sale (usually during the holidays)



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)

A white line-art icon of a lit lightbulb is centered within a large yellow circle in the top-left corner of the slide. The lightbulb has a wavy line inside representing light.

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.

A yellow icon of three interlocking puzzle pieces is centered within a pink circle in the bottom-right area of the slide.A white line-art icon of a hand with the thumb pointing up (a thumbs up gesture) is centered within a large orange circle in the bottom-right corner of the slide.

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



The screenshot shows the Google Classroom interface for a course titled "SEM 1 Physics 11 (Ngo)". The "Classwork" tab is selected, displaying a list of resources. On the left, there is a sidebar with "All topics" and three items: "Class Day-to-Day", "Welcome Week", and "Unit 1: Kinematics". The main content area shows a "Create" button, "Google Calendar" and "Class Drive folder" links, and two sections: "Class Day-to-Day" and "Welcome Week". Each section contains a list of documents with their respective titles and dates.

Section	Resource Title	Date
Class Day-to-Day	Class Calendar	Posted Sep 2
	Course Outline	Posted Sep 2
Welcome Week	Physics 11/12 Formula Sheet	Posted Sep 2
	First Day of Classes Documents	Posted Sep 2
	E-Book	Edited Sep 2

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



Emphasizing
Student
Ownership in
Learning

Lessening the
Reliance on
the Teacher
for Learning
and Growth

Enhanced
Parental Input
and
Contribution
within my
Class Context

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.



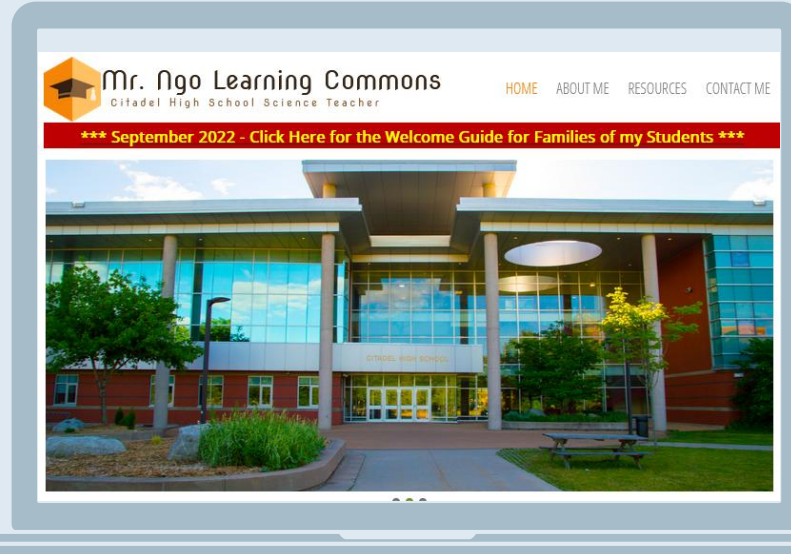


Reaching Out

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



QR Code: To access files relevant to this workshop



My Web Site: www.mrngolearning.com

My Email: mngo@hrce.ca



A white line-art icon of a lit lightbulb is centered within a red circular background. This circle is part of a decorative cluster of overlapping circles in red, orange, teal, and pink in the top-left corner of the slide.

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.

A white line-art icon of four interlocking puzzle pieces is centered within a pink circular background. This circle is part of a decorative cluster of overlapping circles in pink, red, orange, and teal in the bottom-right corner of the slide.A white line-art icon of a hand with the thumb pointing up (a thumbs up gesture) is centered within a teal circular background. This circle is part of a decorative cluster of overlapping circles in teal, red, orange, and pink in the bottom-right corner of the slide.