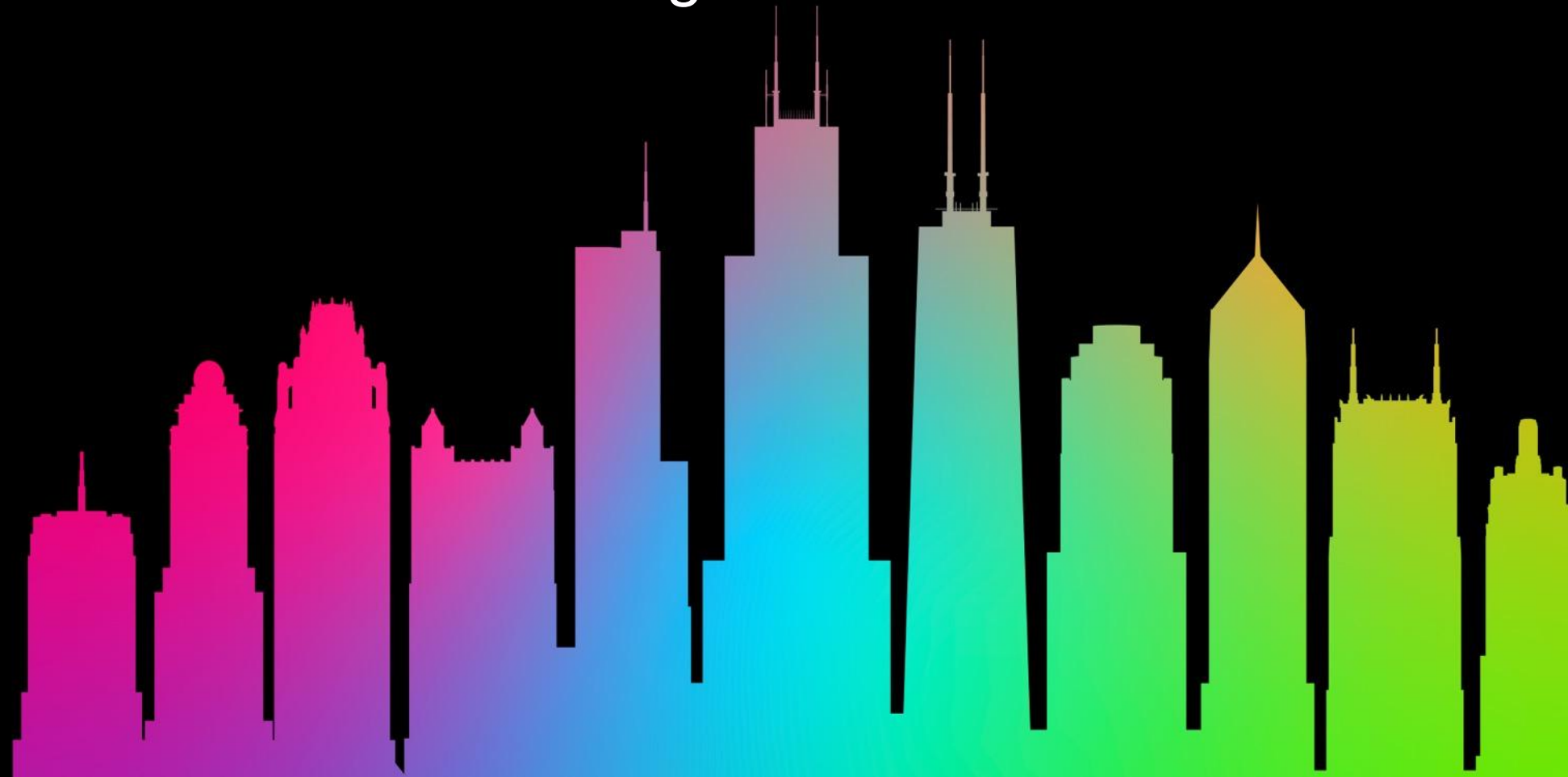
“Wait! Pause there!”

Reflective video review in a teaching team



Reflective video review

Ever watch yourself or a colleague teaching CS?

Was it fascinating and useful, or hard to watch? At Kids Code Jeunesse, our non-profit instructing team has begun using peer-to-peer reflective video review in our internal PD. It's been great for deepening our content knowledge (CK, PCK, and TPACK) and learning from each other's techniques and practices.
It does sometimes get awkward, funny, even cringey (!) -- but it's always enlightening. "Wait, pause there -- what were you trying to do?" "Oh, I like the way you explained that." "Yeah, I get stuck there too." …
In this session, we will watch clips from real KCJ video reviews and talk about the insights and improvements that emerge through this reflective style of PD. Get into video review with us!

In this session…

Our context

The plan

Let's review

The value

Useful tools

Share & learn

➤ bit.ly/kcj-video

Our context

KCJ’s mission

kidscode jeunesse
by digital moment

digital moment

KCJ is a bilingual Canadian charity determined to give every Canadian child access to digital skills education, with a focus on girls and underserved communities.

We encourage inclusive and sustainable learning by teaching kids and the educators that play a crucial role in their development. We’re making sure our kids have the confidence and creative tools they need to build a better future.

Speaker

Mike Deutsch
Director of Learning Services
Kids Code Jeunesse

@kidscoding
@mdeutschMTL

Speaker

@kidscoding
@mdeutschMTL

My path

An 80s kid. With *access*.

1st career: CS degree.
20y in industry, *near* education

2nd career *in* education,
KCJ and McGill University

🇺🇸 --> 🇨🇦

Speaker

@kidscoding
@mdeutschMTL

Where I stand now

Tiohtià:ke (Montréal)
Kanien’kehá:ka land

Them: Let’s reach everyone!
Me: As long as we *reach* everyone.

Borrowing and adapting “sense-making” and teacher-edu methods for CS education

Our context

Primary audience:

Middle-grade (3-8) **generalist** teachers & students, who are starting to use coding for all kinds of purposes.

Pedagogical approach:

We try to teach coding (+AI, +Data, +++) in a way that supports **sense-making**, self-efficacy, and positive affect.*

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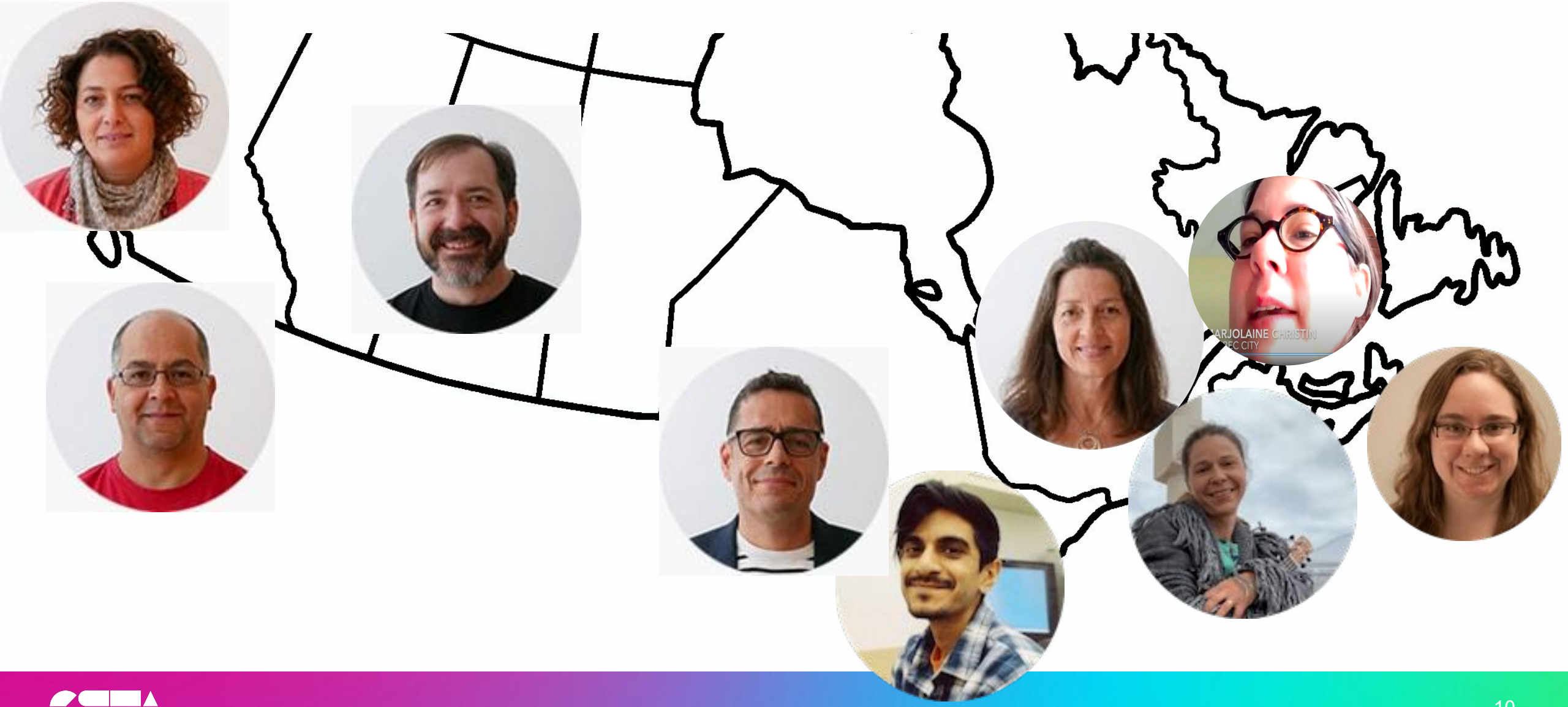
* sadly, this is not the default. 😖

** also, see my session Sat 10:30am: Sensemaking in CS

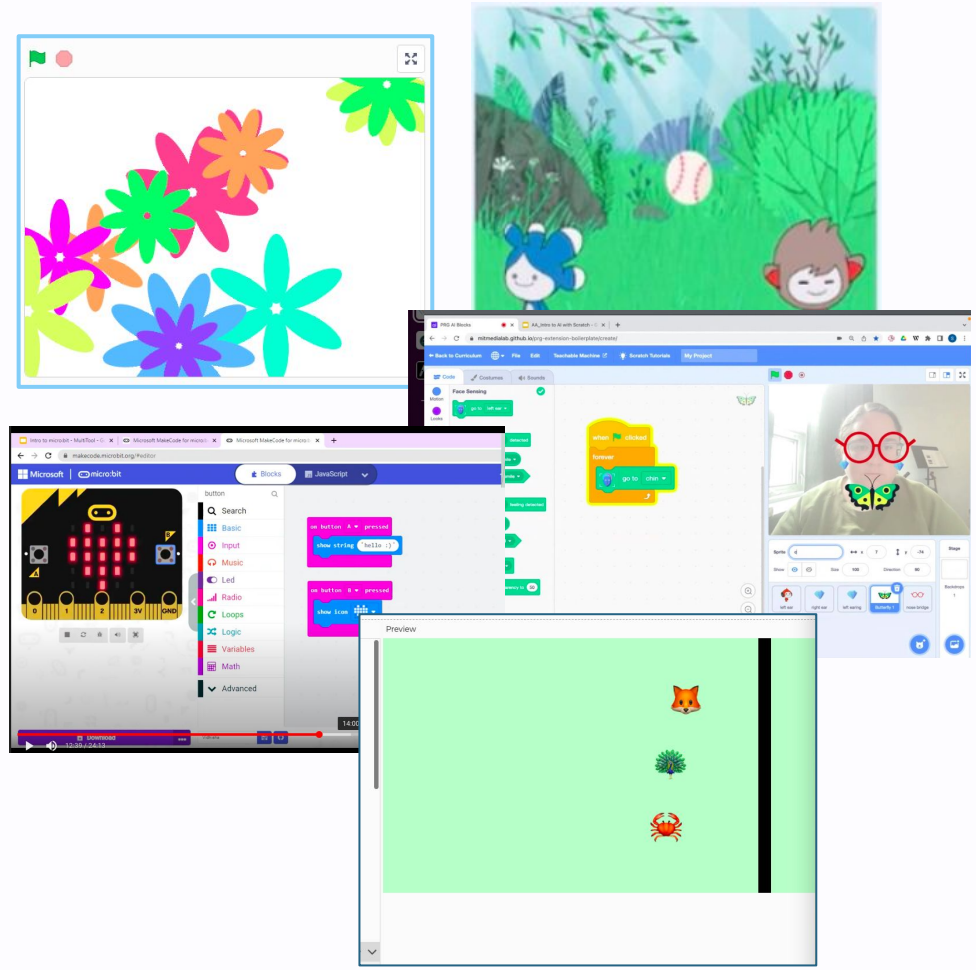
Our context



We teach at scale…

Hundreds of workshops each year, in very different classrooms.

And we're **new almost every time**.



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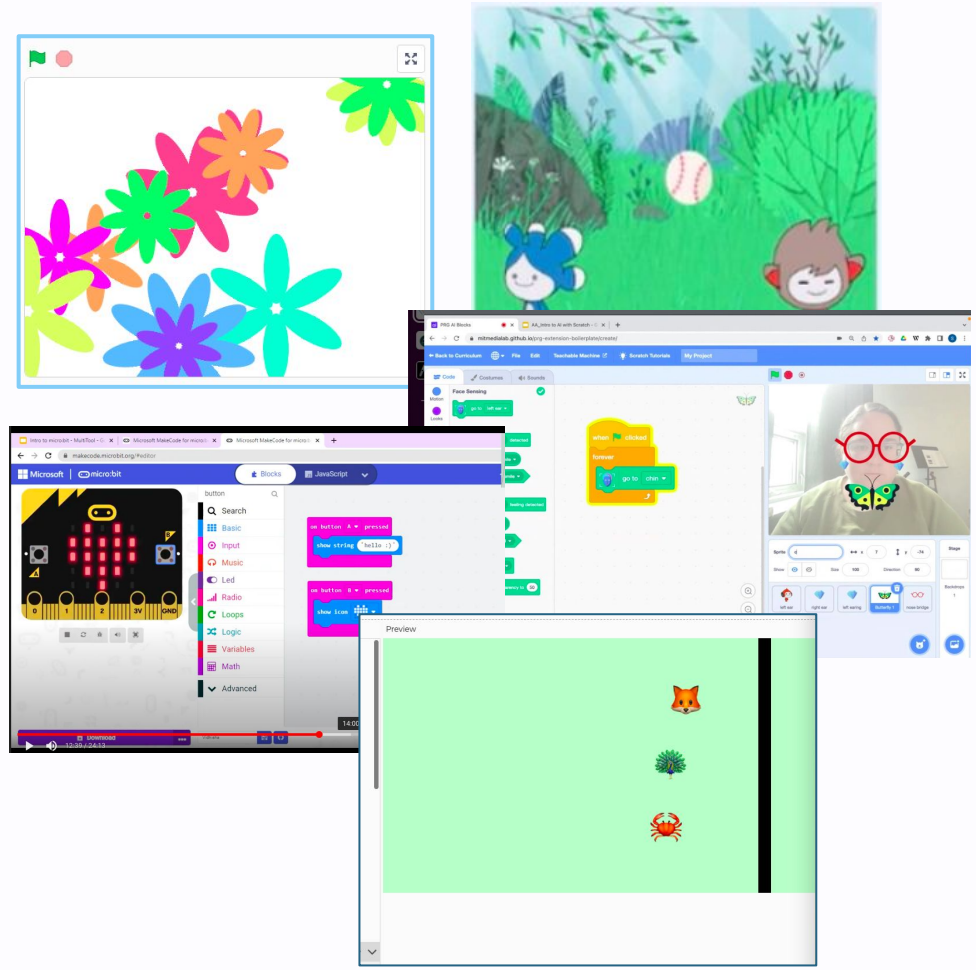
Which raises a question…

Q: How can we make **every** experience solid and empowering?

A: A consistent pedagogical approach.



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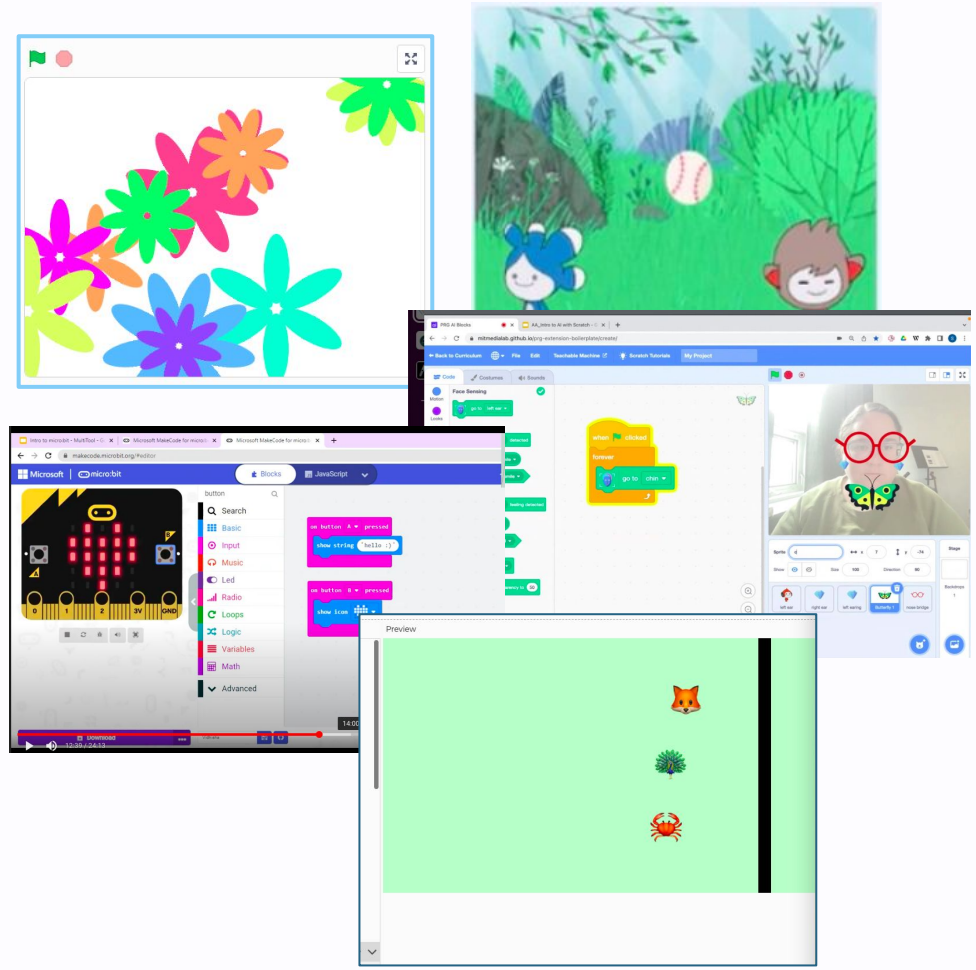
Which raises a question…

We already have documentation, internal training, and ongoing sharing.

Still, **what our teaching could/should look like** is elusive.

➤ **Enter: reflective review.**



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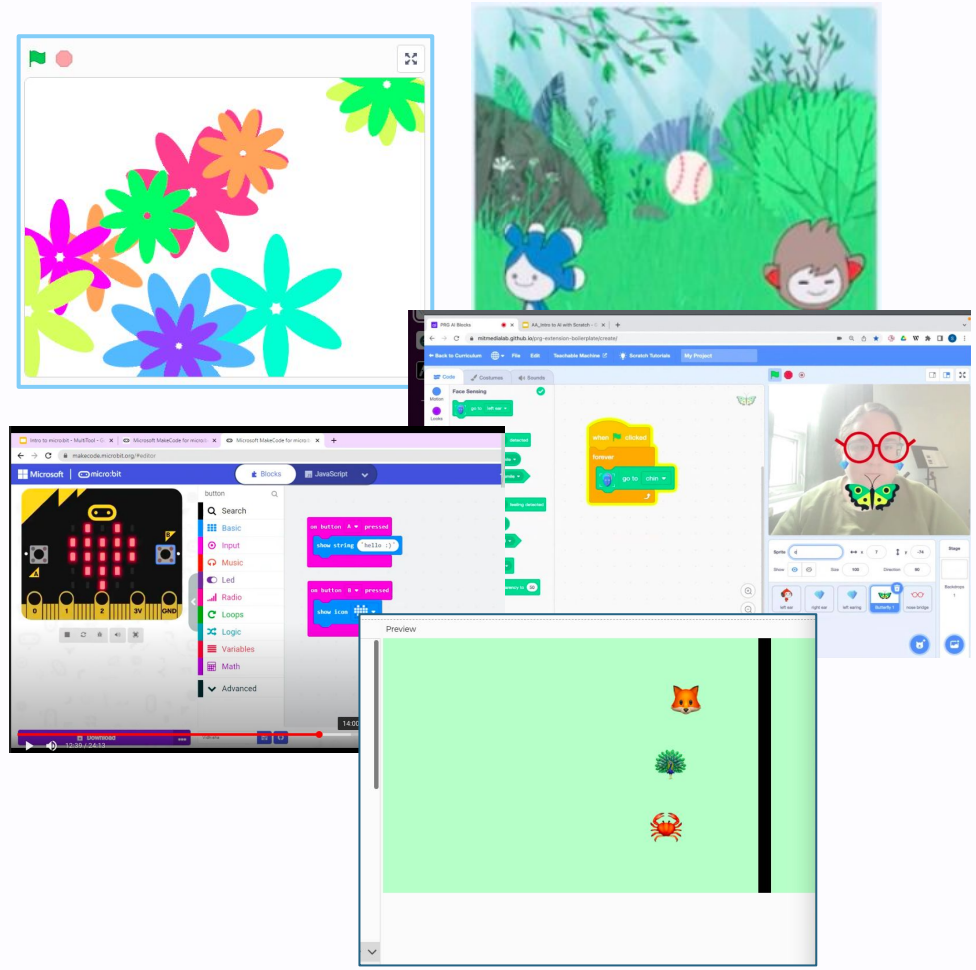
In this session, I hope…

… to **introduce** video review to *never-done-it* folks, and illustrate the growth to be gained.

… to **learn** from folks who already do it.

… to initiate video review **together**.



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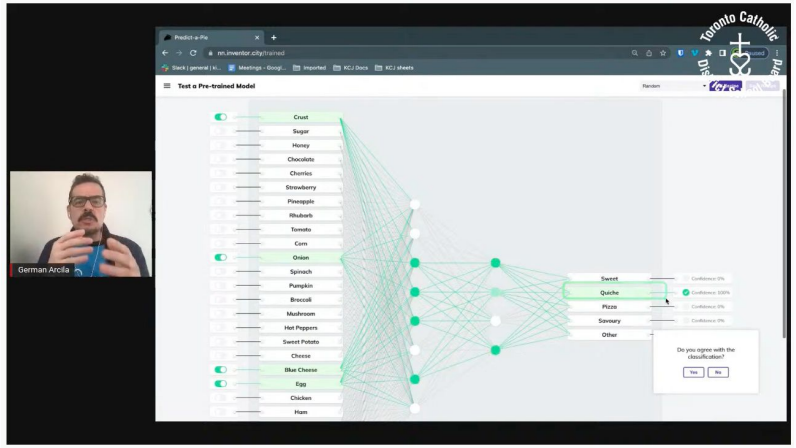
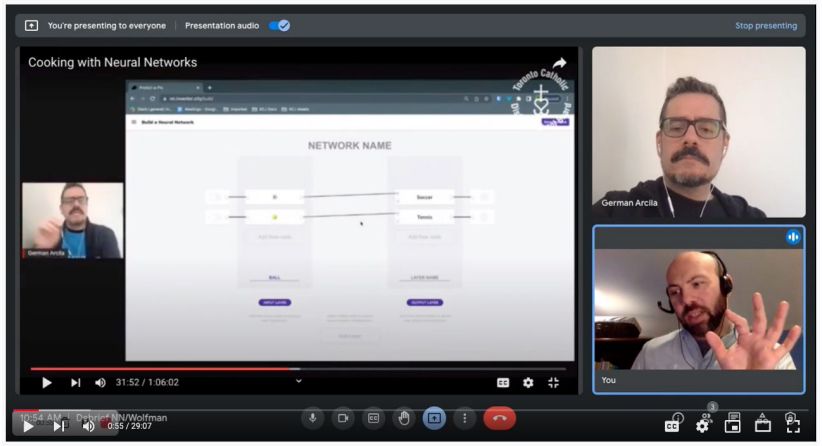
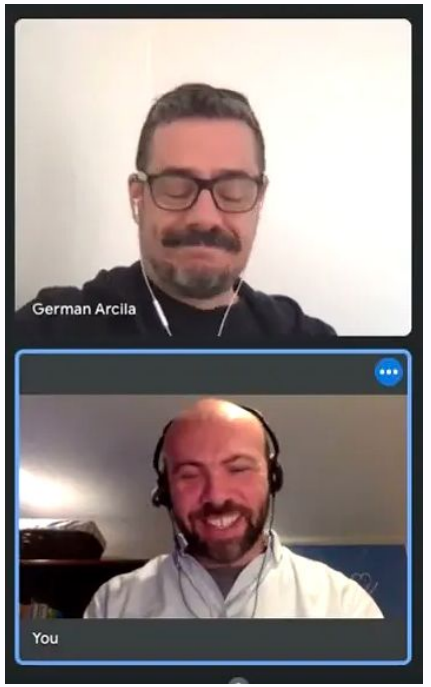
The plan

Reflective review process:







1

The instructor is recorded

2

We watch together and discuss

3

~~Hilarity~~

Insight ensues

Today, selected reviews …

5 KCJ instructors in 4 scenarios where we've tried peer review.

Each: setup → watch → discuss.

crownrefs.com: NBA referee Eric Lewis breaks down a play with referees Ashley Gilpin, left, and Natalie Sago

Let’s review…

Review: Novice veterans

BREAK THEM ALL UP INTO STANDALONE, SHORT CLIPS.

Publish them to a new playlist, and share it here so they can watch again.

Review: Novice veterans

Marjolaine & Marjo

(Abder & Mike)

A click-to-catch **Scratch game**.

Two characters + a ball.

Begin with demo, then build together.

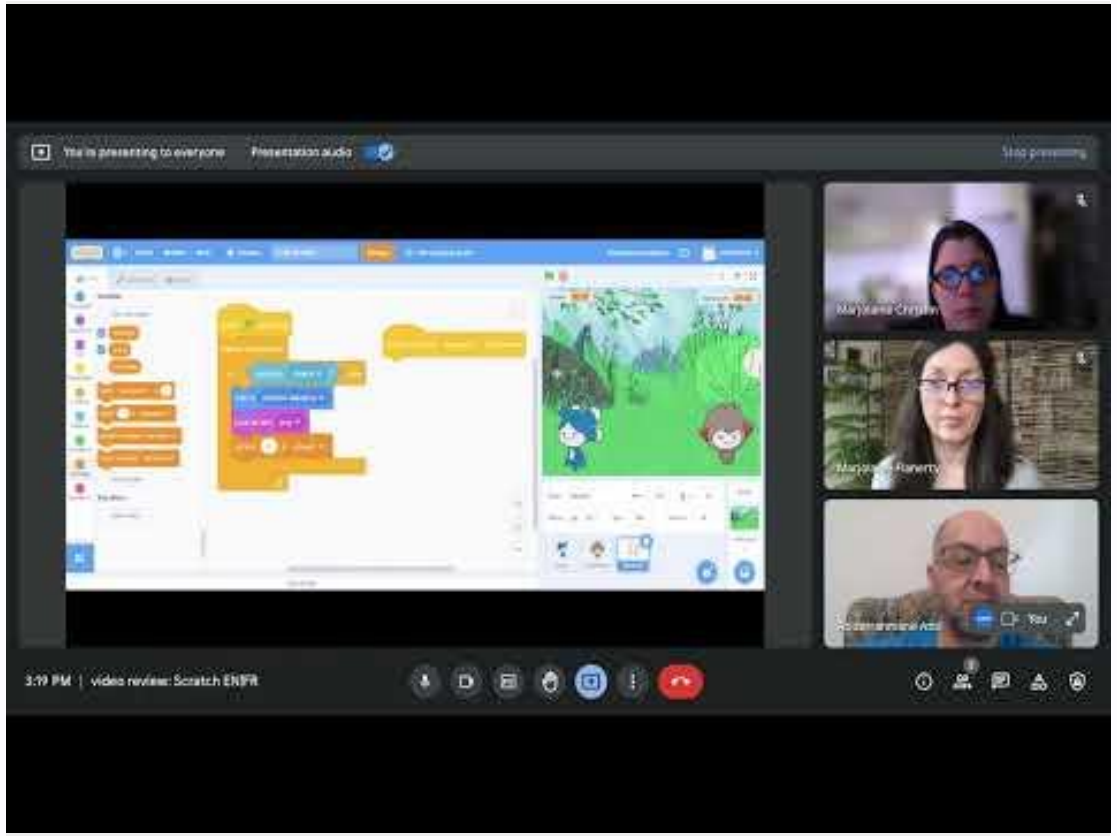
Two *very* different approaches.

2:50 + 2:05 + 3:30 + 1:50 = **10:15**

Review: Novice veterans

Marjolaine (FR)

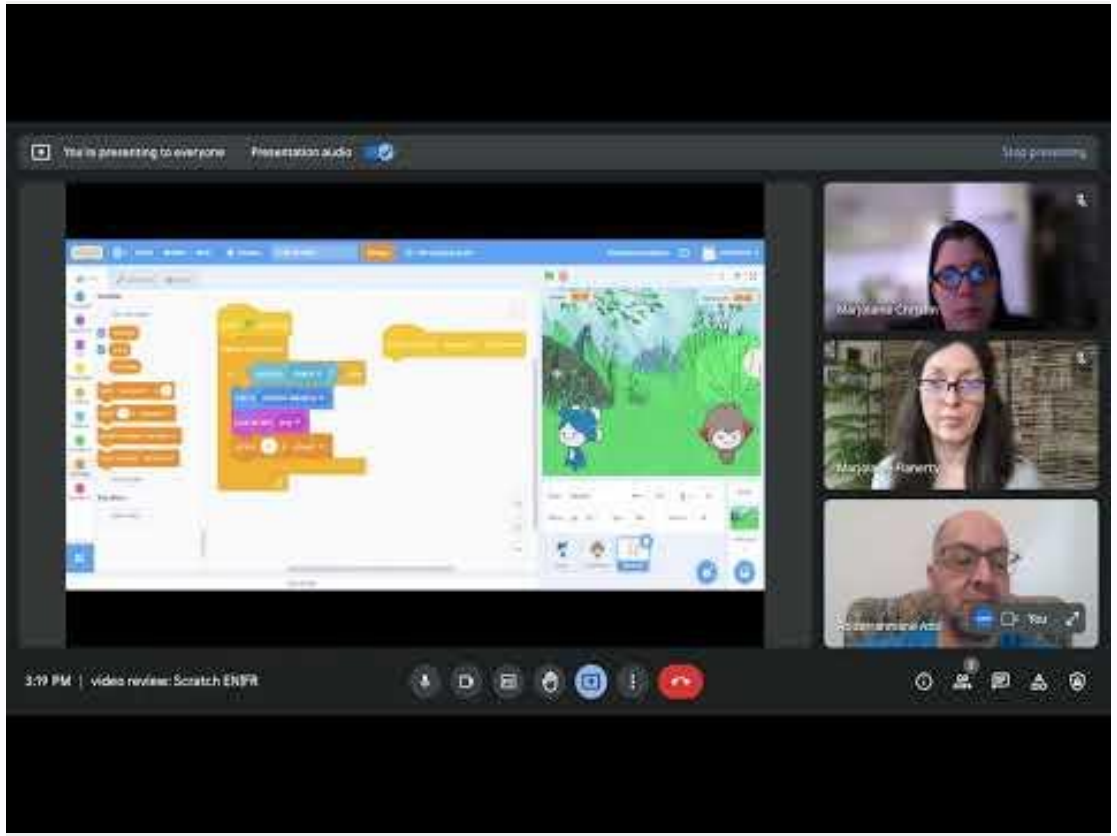
Coding aloud, casting for what-next? (3:10-6:00)*



Review: Novice veterans

Marjolaine (FR)

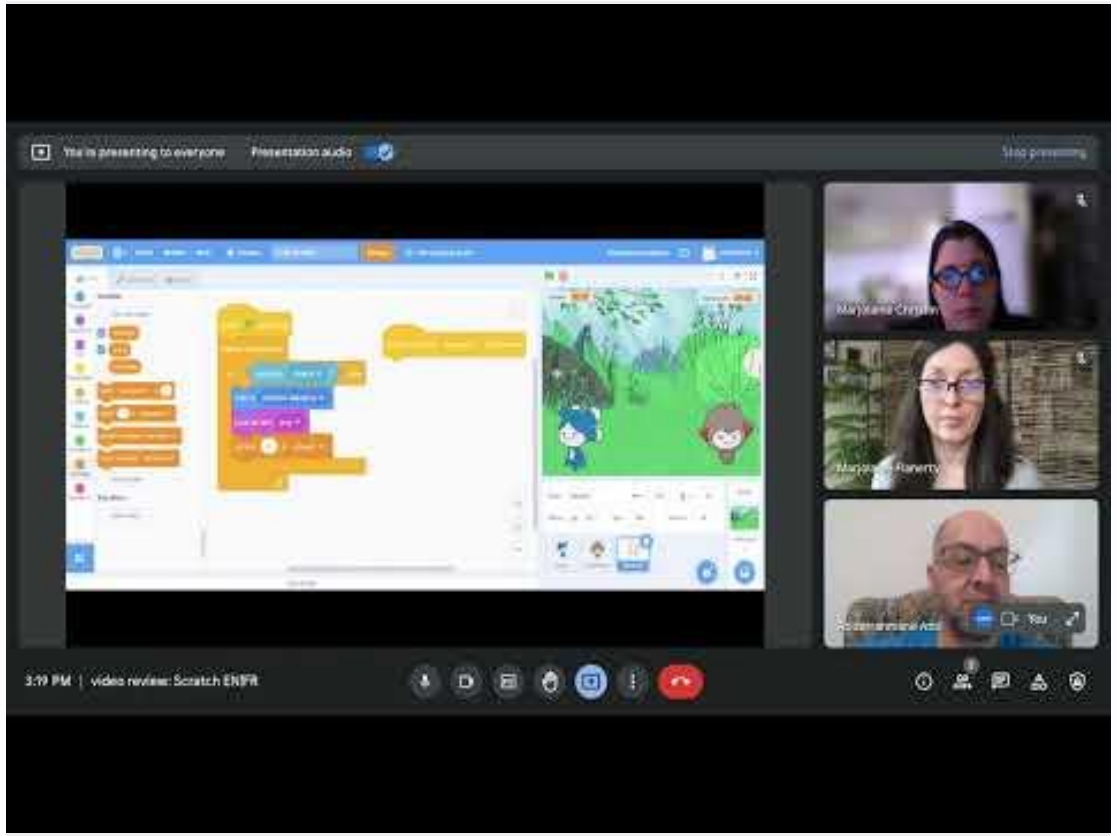
MC: Variables: concept or name first? (7:40-9:45)*



Review: Novice veterans

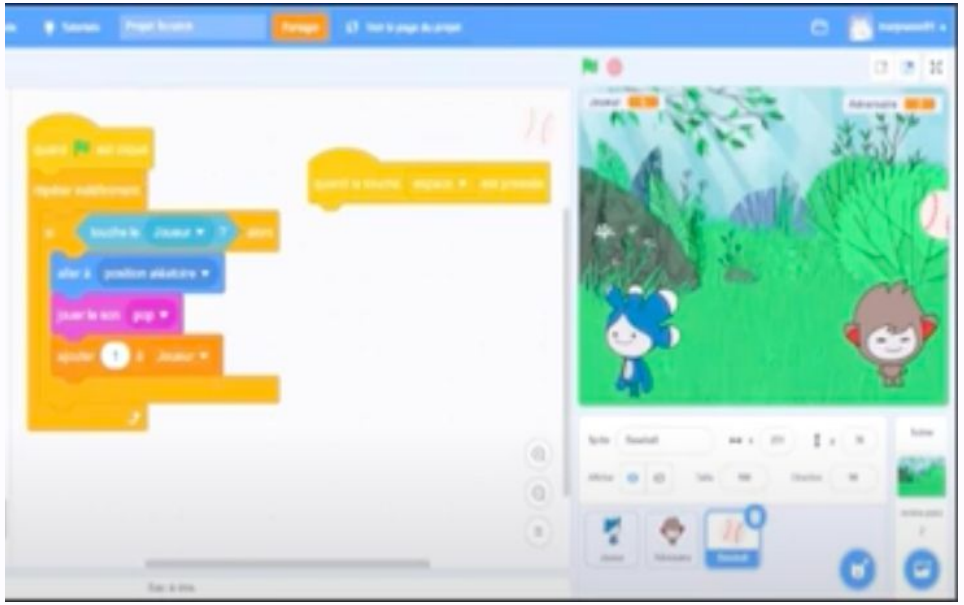
Marjolaine (FR)

Interface is hard for Ss
(~~15:25-17:43~~)



In Marjolaine's 2 clips:
(FR, asking questions, introducing variable/counter)

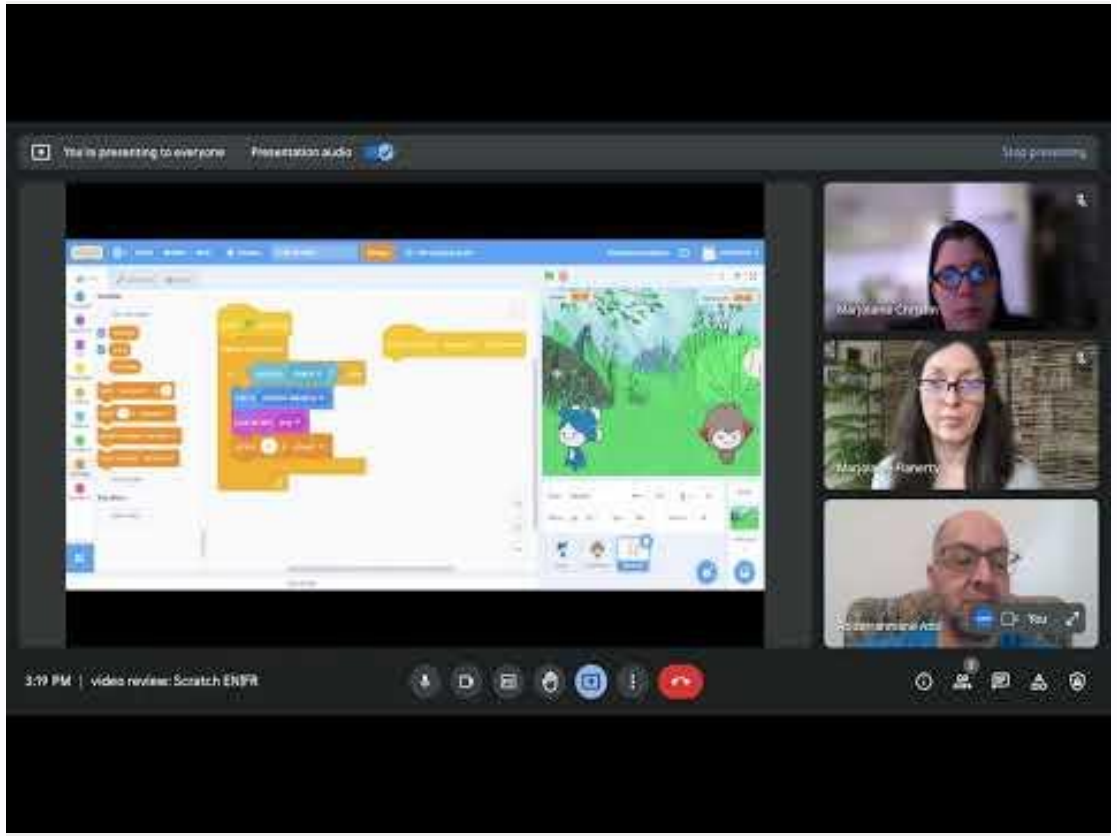
What's something you notice about Marjolaine's instruction, or Abder's peer input?



Review: Novice veterans

Marjo (EN)

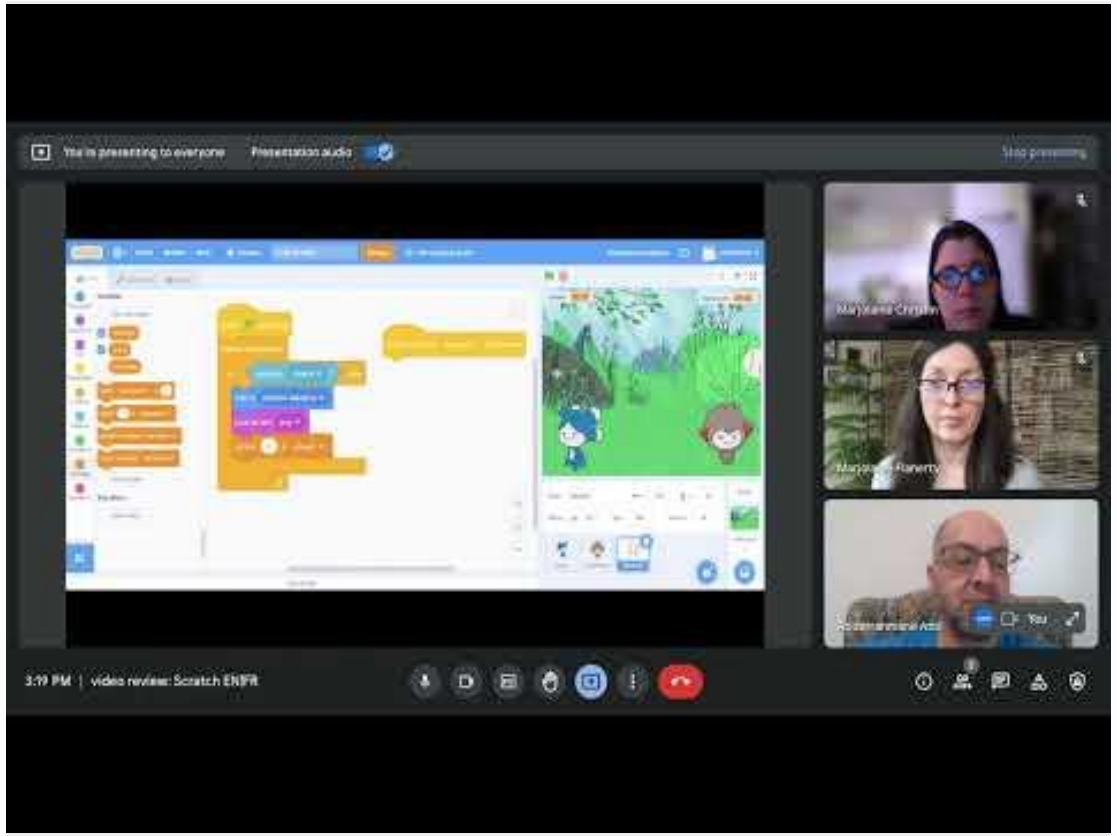
A story ~~→ positioning → wiggle~~
(27:00-30:30 ~~32:30~~)*



Review: Novice veterans

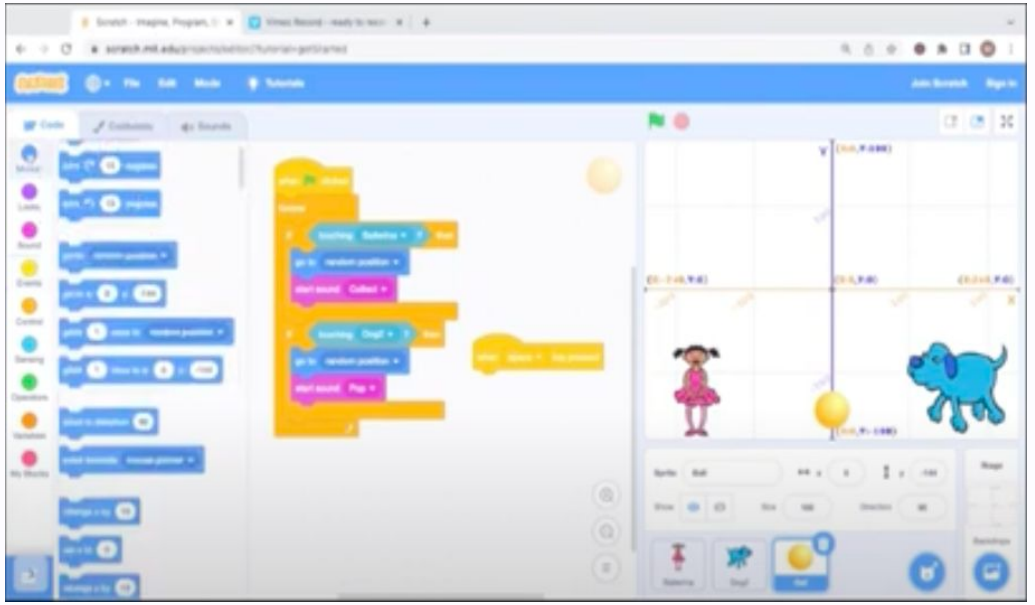
Marjo (EN)

K.I.S., says the coach 🙄
(41:50-43:40)



In Marjo's 2 clips:

(EN, embedding a story, going slowly)



What's something you notice about Marjo's instruction, or Mike's peer input?

In the “Novice veterans” session (Marjolaine + Marjo):

(FR, asking questions, introducing variable/counter)
(EN, embedding a story, going slowly)

What’s something you notice about what this session (and the recording of it) is doing for me (the teacher educator) and for the team?

Review: Same lesson, different takes

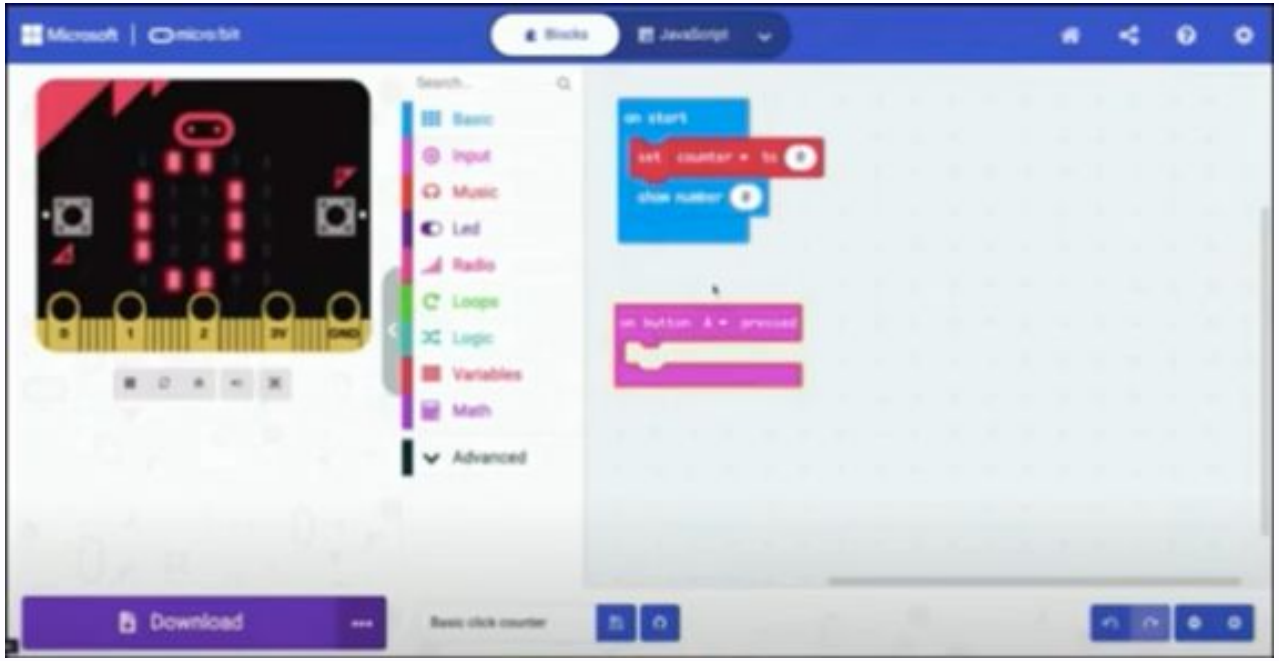
Sophie & Mike

Experienced instructors, tinkering with the same (deeper) lesson.

Build a DIY math manipulative.

Same LOs, different strategies. Sophie has more “reps.”

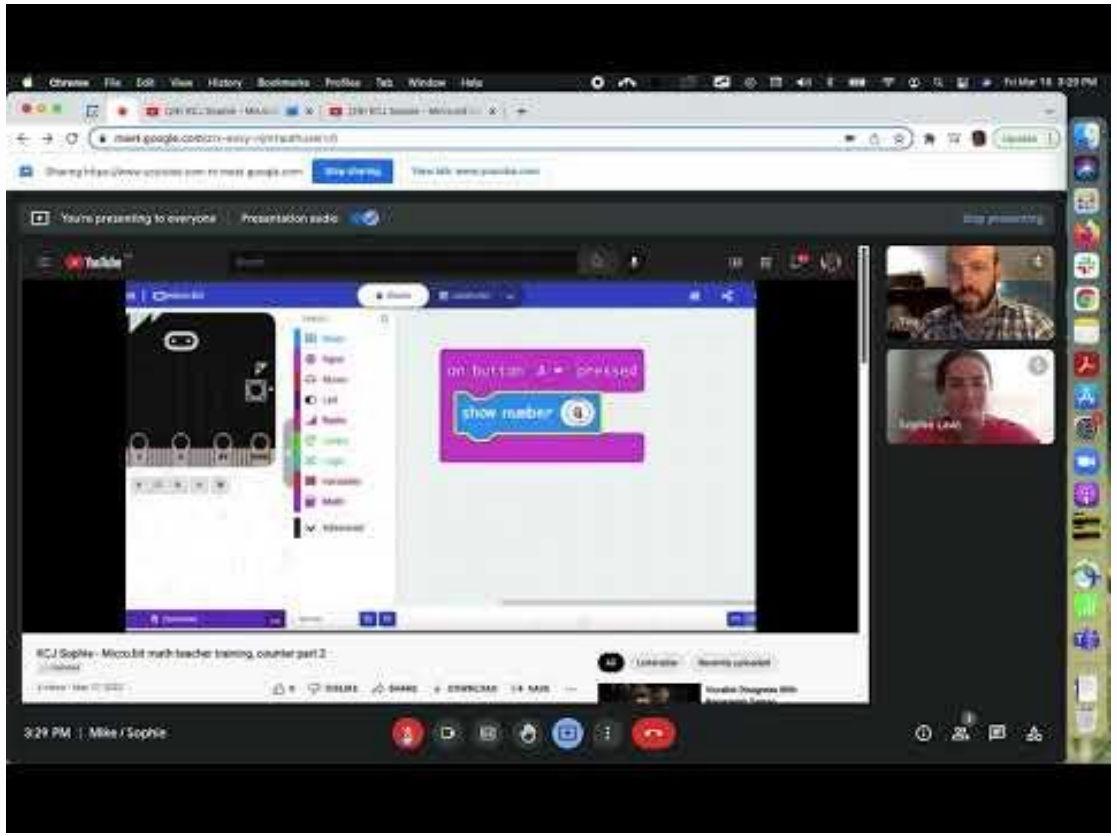
4:45 + 2:00 ~~+ 2:20~~ = **6:45** ~~9:05~~



Review: Same lesson, different takes

Sophie

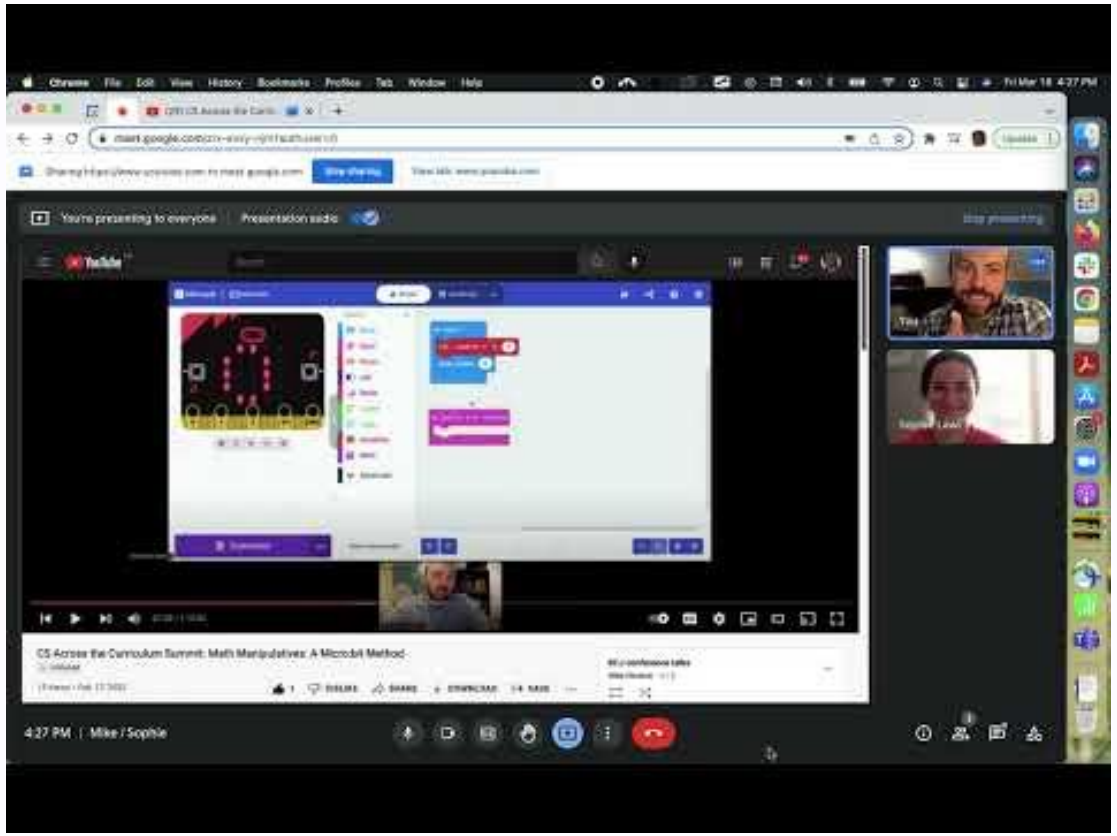
Letting Ss go down an unproductive path. (0:00-4:45)*



Review: Same lesson, different takes

Mike

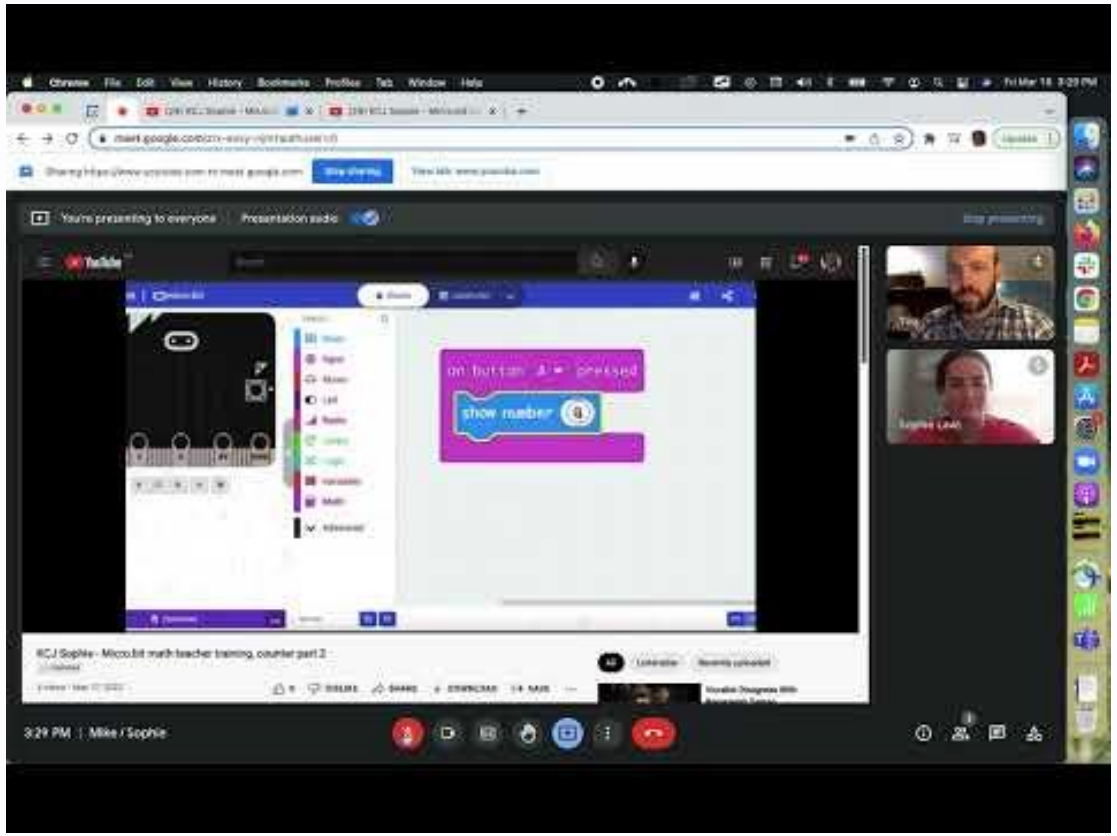
Mike ignores K.I.S. 🤦‍♂️
(6:00-8:00)



Review: Same lesson, different takes

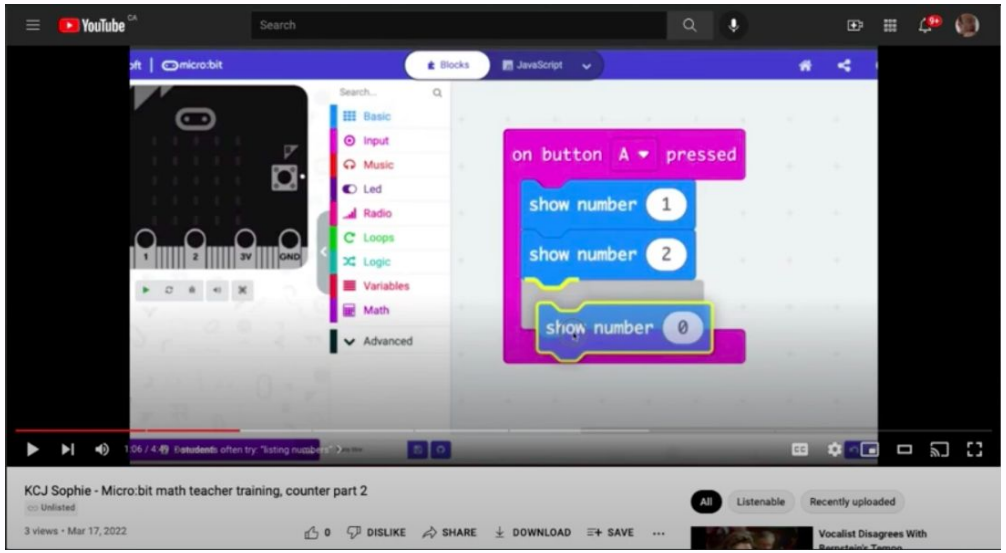
Sophie

New definition for “variable”
(10:45-13:05)



In “Same lesson, different takes”:
(Sophie: unproductive path)
(Mike: ignore KIS)

What’s something you notice about Sophie + Mike’s instruction, or peer input?



In “Same lesson, different takes” (Sophie + Mike):

(Sophie: unproductive path)
(Mike: ignore KIS)

What’s something you notice about what this session (and the recording of it) is doing for me (the teacher educator) and for the team?

Review: Same lesson, different takes

Epilogue:

- Mike completely rewrote his conference talk after reviewing Sophie. (**Failed to fully capture Sophie's method**. She is more patient with sensemaking.)
- We made **different coding choices** (that are basically equivalent, CS-wise).
- Sophie adds an extra button. Teachers love it! (Mike says: do it on paper)
- Mike went deeper with **CS+Math integration**. More math-specific cases to talk about. Experienced math teachers know where to take this.

What next?

(a) *Talk about* reflective review, or
(b) see more footage? (A.I. WIP, 4:00)

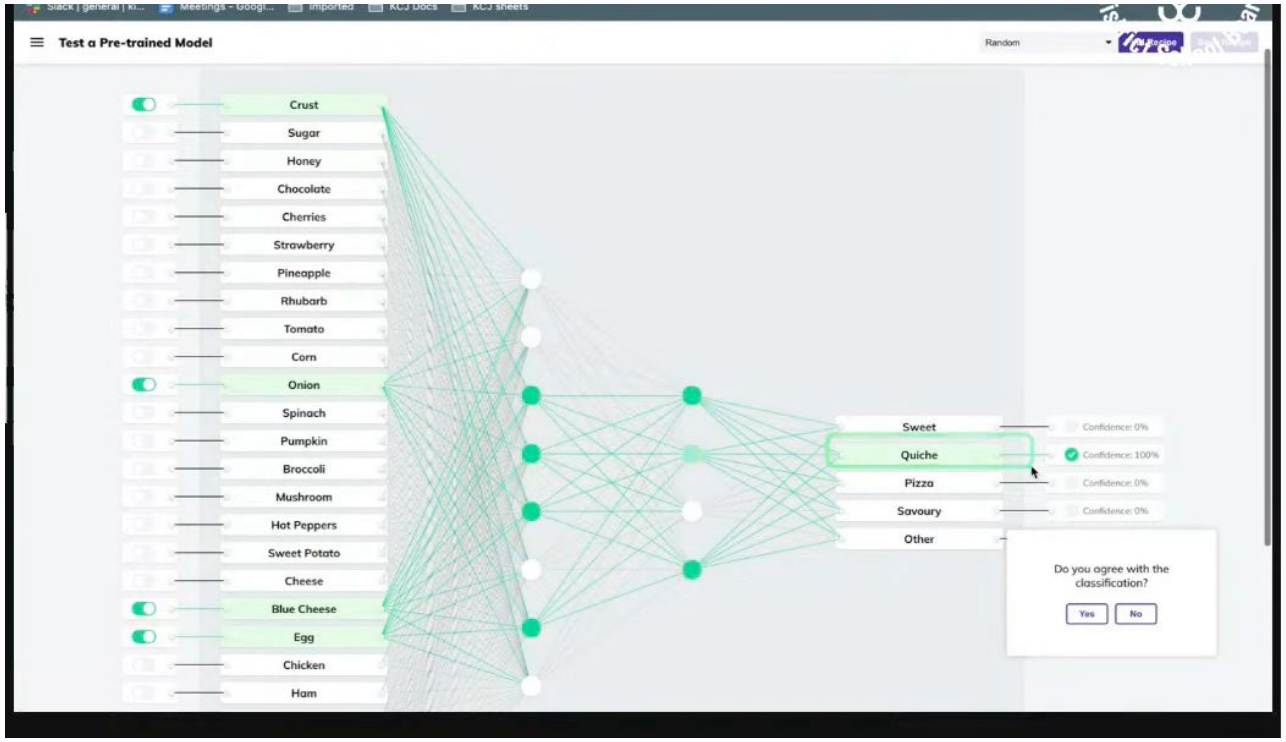
Review: Cutting-edge lesson WIP

German

New lesson on a familiar platform. Not sure how best to make it work.

“Are the concepts coming across the way I want?”

“Did *this project* work well as the vehicle?”



~~3:15~~ + 4:00 = **4:00** ~~7:15~~

Review: Cutting-edge lesson WIP

German

Interface, gestures, & live coding (0:00-3:15)*

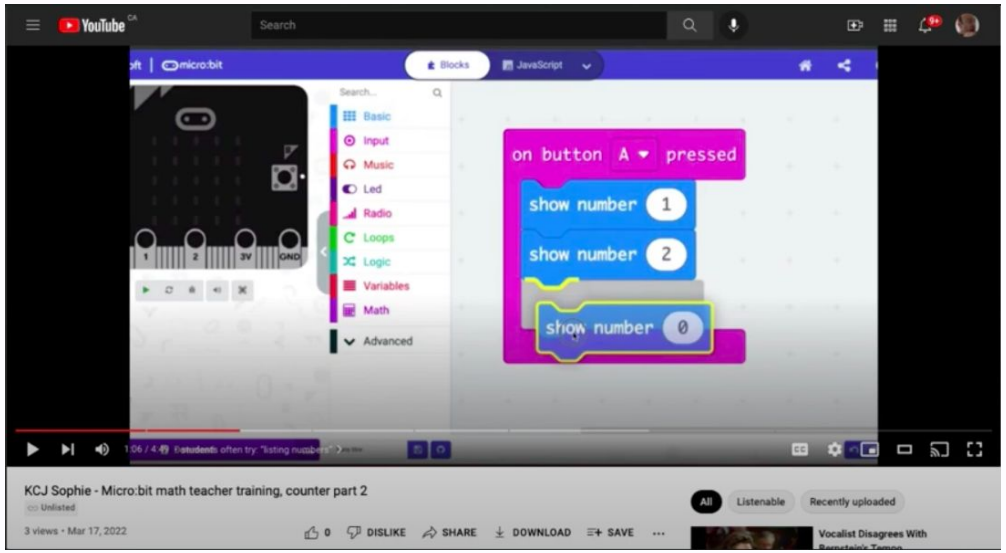
Review: Cutting-edge lesson WIP

German

Can this even *be* simplified? Or are there too many layers for it to work? (17:09-21:09)

In “Cutting-edge lesson WIP”:
(German: Can this even be simplified?)

What’s something you notice about German’s instruction, or Mike’s peer input?



The value

Some value we've seen

German's thoughts after reviewing and being reviewed.

Some value we've seen

Practical knowledge & skill development

- CK, PCK, TPCK.
- Work on good prompts:
  - "I notice that you…"
  - "My goal here was…"
- Ideas and styles flourish.
- Vicariously experience new situations, problems, ideas.

Pedagogical alignment

- Simply be reflective.
- Practice non-judgmental noticing.
- Illustrate and reinforce our preferred pedagogy.
- Articulate a strategy (or 3). Choose moves accordingly. Reflect on how it went.
- R&D honing new material

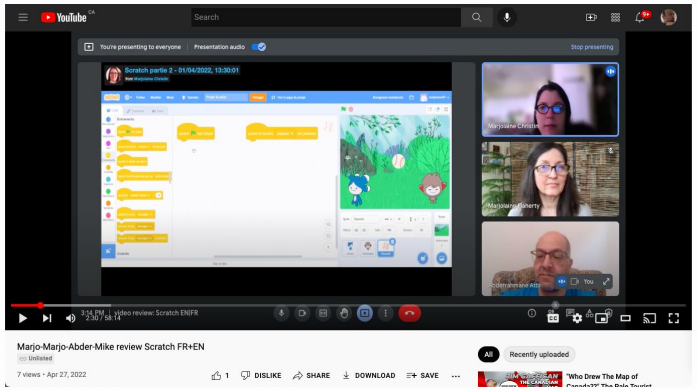
Team development

- Who is being developed? Who is doing the coaching?
- Humility, generosity, appreciation.
- Status and pride as a peer reviewer.
- Self efficacy:
  "I'm pretty good at…"
  "Ok, I could work on…"

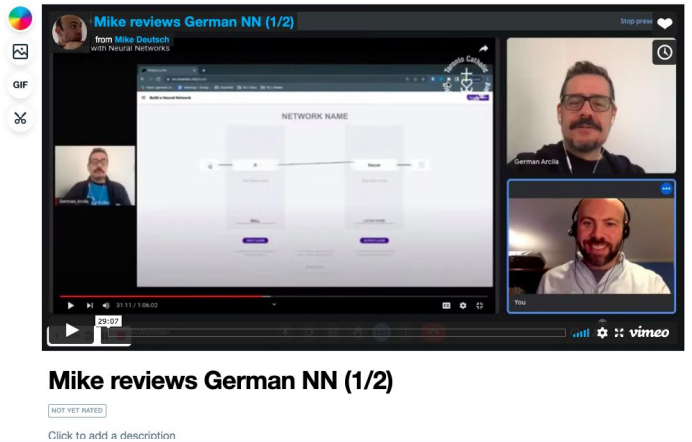
Useful tools

Useful tools

YouTube



Vimeo, Loom



Swivl

Features to consider:

- Capturing screen and camera
- Editing tools
- Recording in-browser vs app
- Free vs Paid
- Privacy (private/unlisted)
- Sharing (playlist, etc.)
- Reviewing & commenting as a team

Share & learn

Share & learn

We're going to build on this process for 2022-23.

We'd love to **support other CS teachers** to review like this too! Can you envision using reflective review?

➤ bit.ly/kcj-video

I'd be keen to watch | analyze | shape…

[who] teaching [what].

I'd love to have another pair of eyes on…

[My own lesson in _____.]

Add your name if you'd be interested in trying this together…

Thank you!

Come see us!

digital moment

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by digital moment

Matthew Griffin

Coding without a Safety Net: Creating Algorithmic Art in Real Time

W179a, Sat 9:00am

Mike Deutsch

Birds of a Feather discussion: "Sensemaking" in CS

W178b, Sat 10:30am

CSTA

Thank you