

READY, SET...TEACH!

FROM IDEA CONSUMERS TO KNOWLEDGE CO-CREATORS

Designing your classroom as a Knowledge Building community

Rob Huang, PhD

Educational Developer, Instructional Practices & Student Engagement

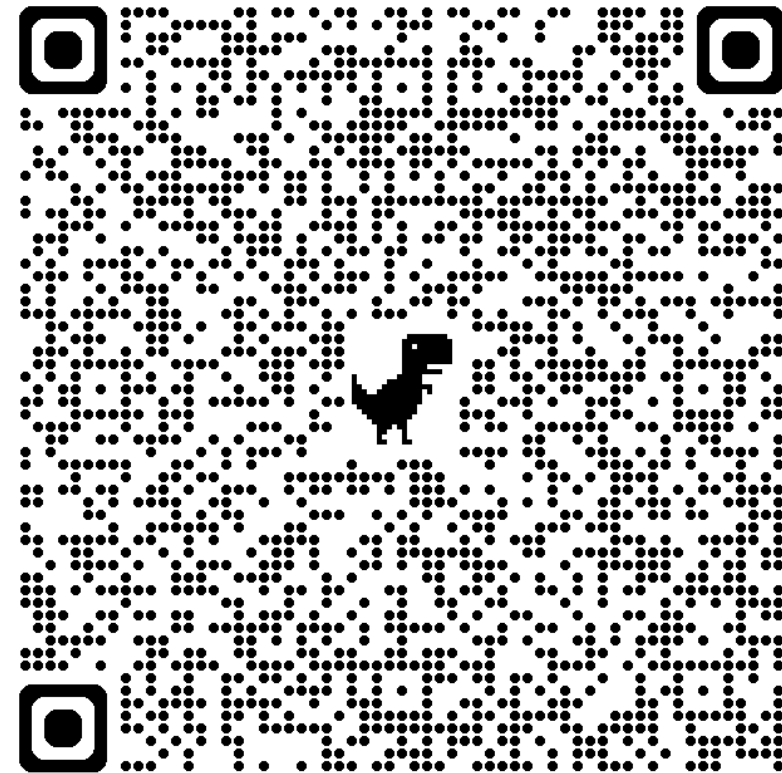
rob.huang@utoronto.ca



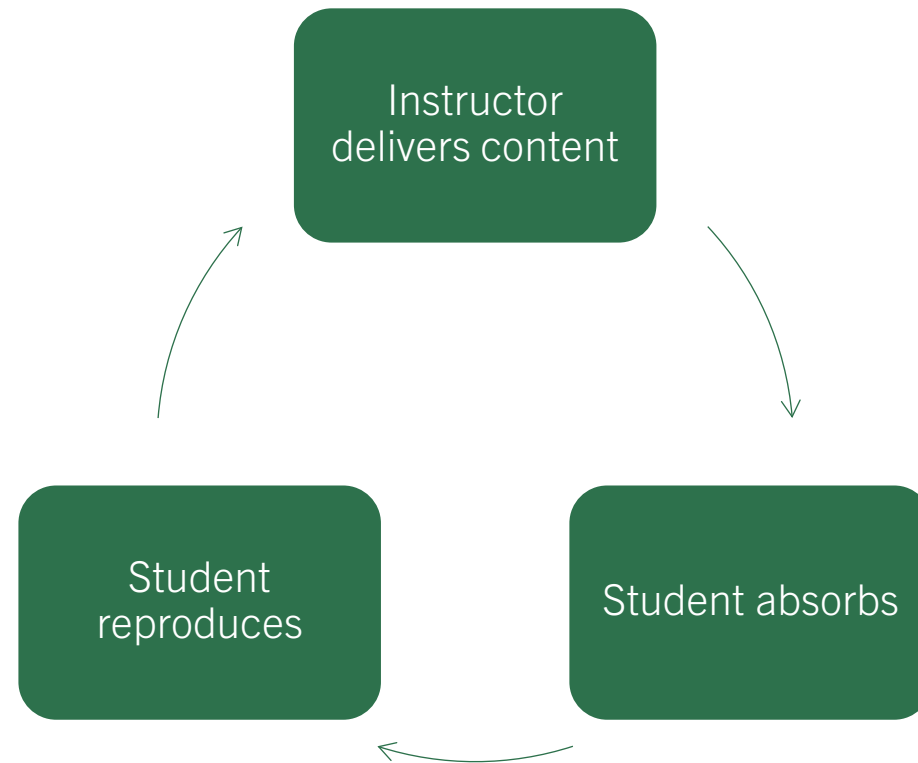
ACCESS CHECK

We encourage you to check, identify, and question your learning environment for any of the following and welcome comments if there are elements that we can support to reduce barriers.

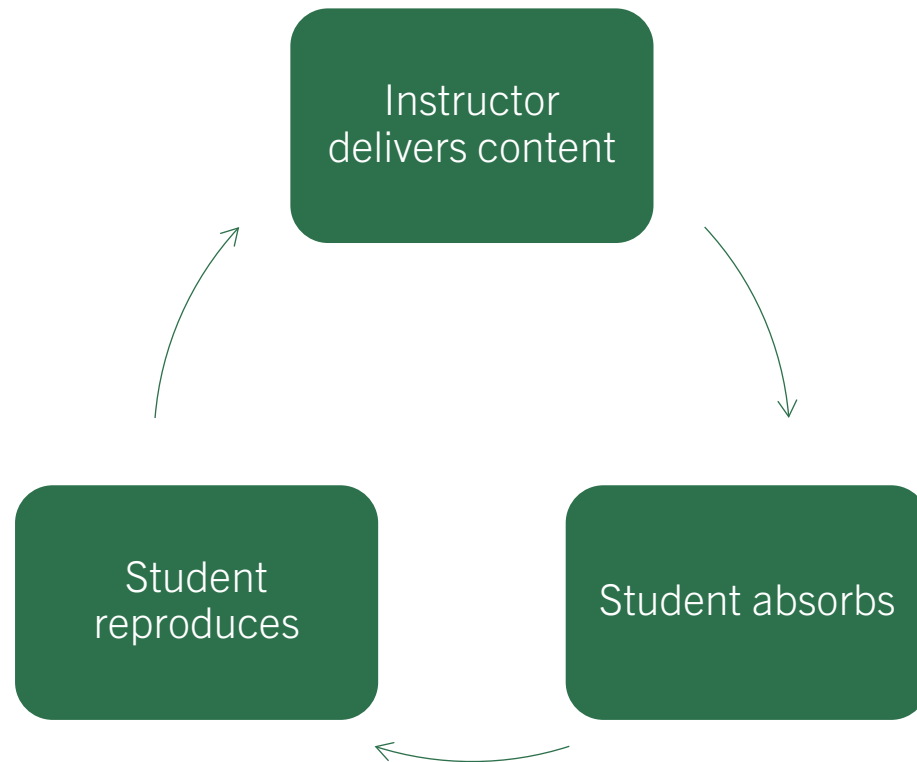
- Technology
- Space
- Slide Deck for all Sessions + Resources via QR code
- Pace



FAMILIAR LOOP



FAMILIAR LOOP



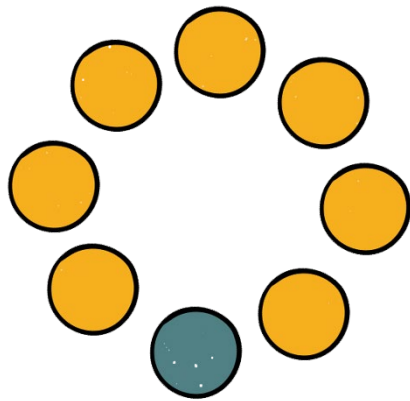
Summarize the reading and share a takeaway

What if an idea wasn't finished when
it was submitted?

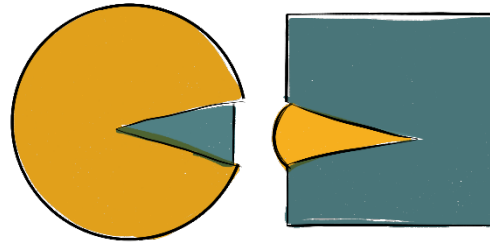
Ideas are improvable objects

Scardamalia & Bereiter (2003)

KB PRINCIPLES TO CONSIDER



Community Knowledge

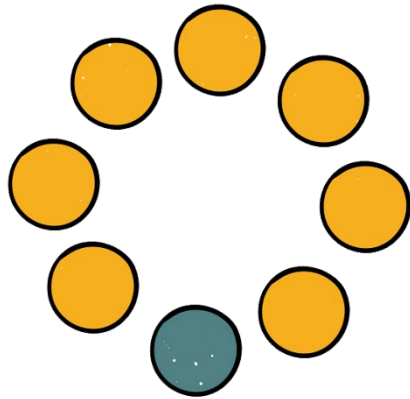


Epistemic Agency



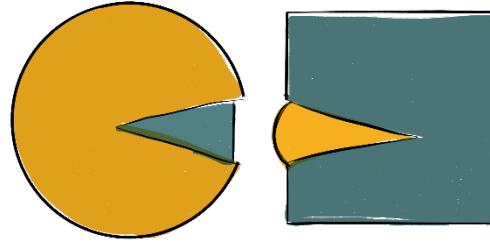
Idea diversity

KB PRINCIPLES TO CONSIDER



Community Knowledge

Produce ideas of value to others and share responsibility for its overall advancement



Epistemic Agency

Students take responsibility for their ideas by determining the learning outcomes, processes, and challenges

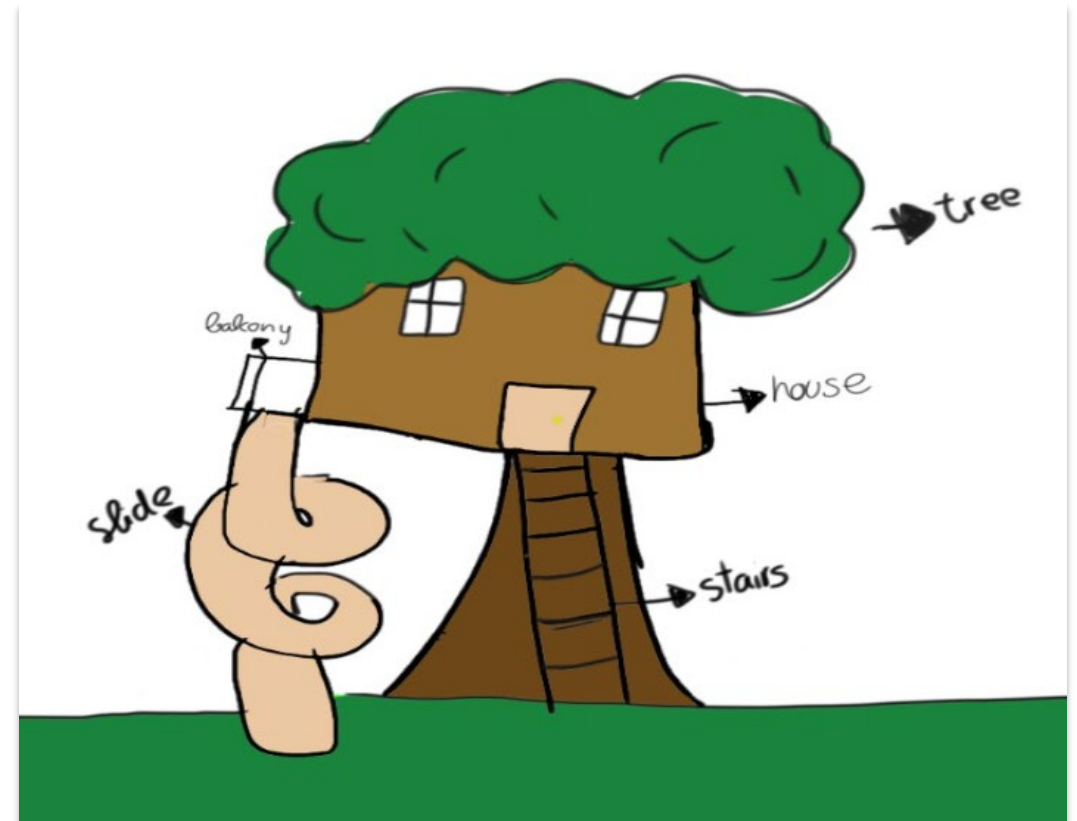


Idea diversity

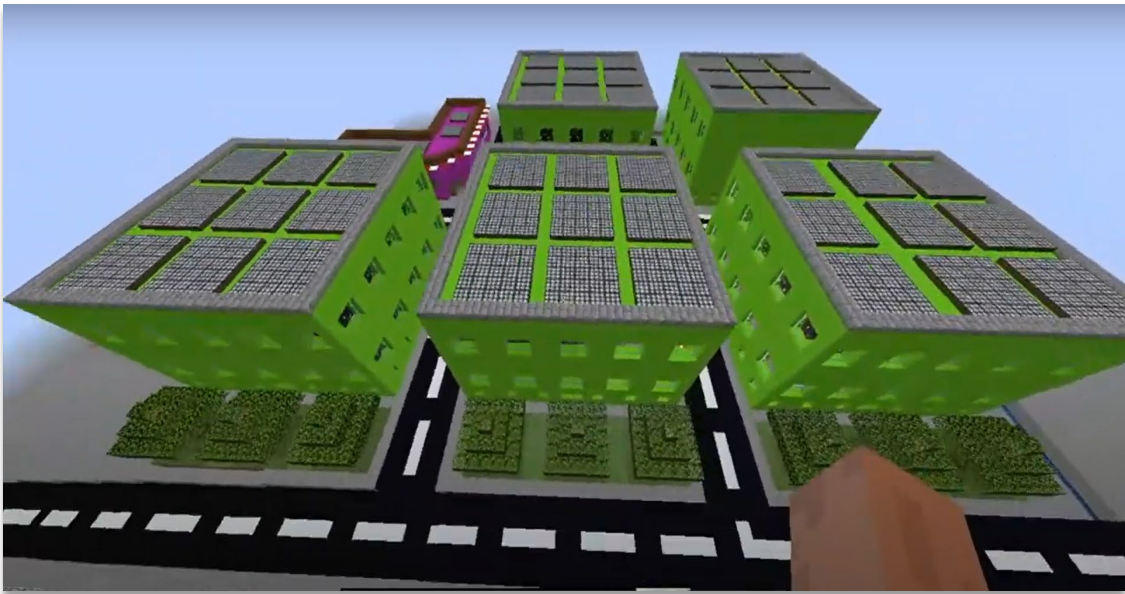
Ideas are improved through comparison, combination, and alignment with other ideas. Enriched through distinctions and recombination

Scardamalia & Bereiter (2010)

A QUICK SNAPSHOT



A QUICK SNAPSHOT



SUMMARIZE THE READING AND SHARE A TAKEAWAY

- Who sets this question?
- What happens to an idea once it's posted / submitted?

PROMPT REDESIGN MATRIX

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)		
CUMULATIVE (revisited, built on, revised)		

PROMPT REDESIGN MATRIX

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)	Traditional prompt Instructor asks → students answer → instructor evaluates	Iterative inquiry Instructor establish the central question → students repeatedly return to it as their understanding develops.
CUMULATIVE (revisited, built on, revised)	Student selected inquiry Students choose the question/topic, but the resulting work is essentially a one time artifact	Knowledge Building Students generate questions, contribute ideas, build on one another, and continually revise the collective understanding.

PROMPT REDESIGN MATRIX

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)		
CUMULATIVE (revisited, built on, revised)		

Summarize the articles
argument and state whether
you agree/disagree.

PROMPT REDESIGN MATRIX

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)		
CUMULATIVE (revisited, built on, revised)		

Summarize the articles
argument and state whether
you agree/disagree.

PROMPT REDESIGN MATRIX

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)		
CUMULATIVE (revisited, built on, revised)		

Post an initial claim about the article’s argument. Before your second post counts, you must build on, complicate, or challenge a classmate’s claim, naming what idea of theirs you’re working from.

PROMPT REDESIGN MATRIX

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)		
CUMULATIVE (revisited, built on, revised)		

Identify an idea, tension, question, or claim in the article that you think the class should investigate further. Post your initial thinking and explain why it matters.

Then, build on the evolving discussion by taking up a classmate's idea. You might extend it, challenge it, connect it to another idea, introduce a complication, or propose a new question. Name the idea you're working from and show how your contribution changes or advances the discussion.

As the discussion develops, return to the conversation and revise, refine, or reconsider your original thinking in response to what the class has collectively developed.

REDESIGN MATRIX // ACTIVITY (10 MIN)

	CLOSED (Instructor posed, Fixed)	OPEN (Students shape/select it)
STATIC (Submitted, graded)		
CUMULATIVE (revisited, built on, revised)		

Use a discussion prompt or assignment from your own course.

1. Plot it on the matrix with the guidance of the 2 questions:
 - Who set the question?
 - What happens after its been submitted?
2. Pick one axis to shift
3. Add the single constraint that shifts the prompt or assignment



SHARE WITH A NEIGHBOUR (5 MIN)

- Does the redesign actually shift the axis that was intended?
- Would students behave differently because of it, or is it the same task with new wording?



RECAP

- **Community Knowledge**
 - Produce ideas of value to others and share responsibility for its overall advancement
- **Epistemic Agency**
 - Students take responsibility for their ideas by determining the learning outcomes, processes, and challenges
- **Idea Diversity**
 - Ideas are improved through comparison, combination, and alignment with other ideas. They are enriched through distinctions and recombination

Prompt Matrix

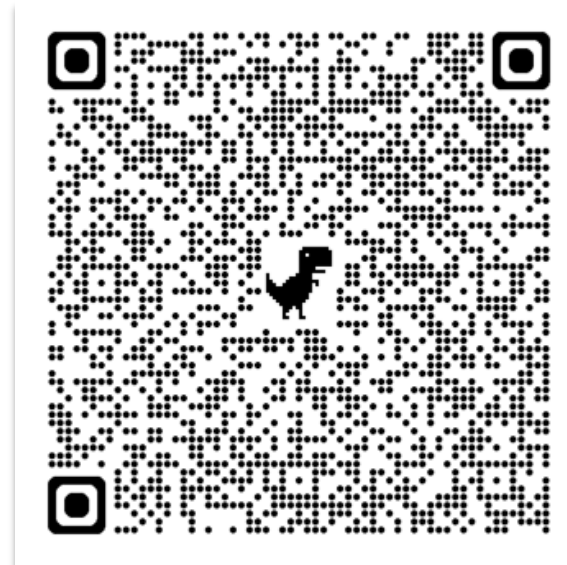
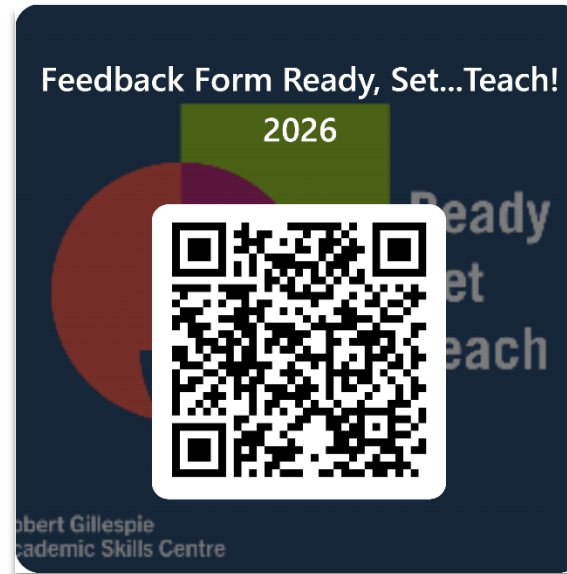
- Shift one axis at a time
- Assignments / prompts do not always have to be in the bottom right corner
- This is only a diagnostic tool, not a strict rule

THANK YOU!

rob.huang@utoronto.ca

eddev.utm@utoronto.ca

<https://www.utm.utoronto.ca/rgasc/>



REFERENCES

- Scardamalia, M., & Bereiter, C. (2003). Knowledge building. In J. W. Guthrie (Ed.), *Encyclopedia of education* (2nd ed., pp. 1370–1373). Macmillan Reference USA.
- Scardamalia, M., & Bereiter, C. (2010). A brief history of Knowledge Building. *Canadian Journal of Learning and Technology*, 36(1), 1–14. <https://doi.org/10.21432/T2859M>
- Scardamalia, M., & Bereiter, C. (2014). Knowledge building and knowledge creation: Theory, pedagogy, and technology. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (2nd ed., pp. 397–417). Cambridge University Press. <https://doi.org/10.1017/CB09781139519526.025>