UNIVERSITY OF TORONTO MISSISSAUGA

ROBERT GILLESPIE ACADEMIC SKILLS CENTRE

Framing AI for Teaching Integration

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When a student uses AI inappropriately, who is affected?

When a [insert role] uses AI inappropriately, who is affected?

Agenda

- Systems Thinking
- Two-lane Approach to AI
- Words Matter
- Plan One Thing Activity

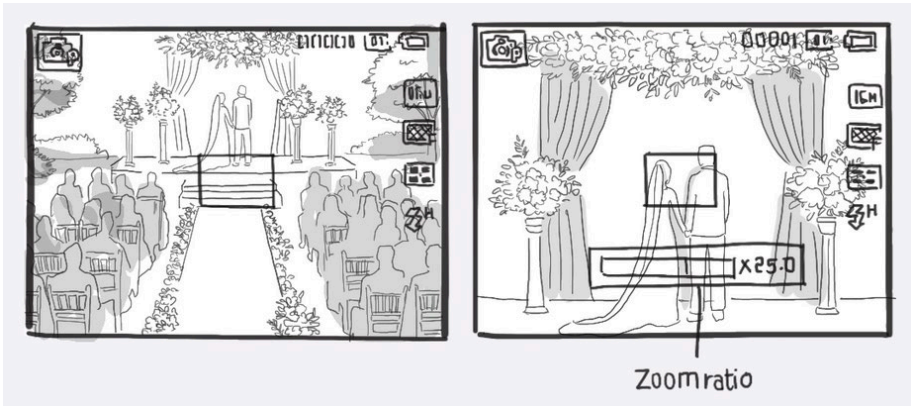
Systems Thinking (def.)

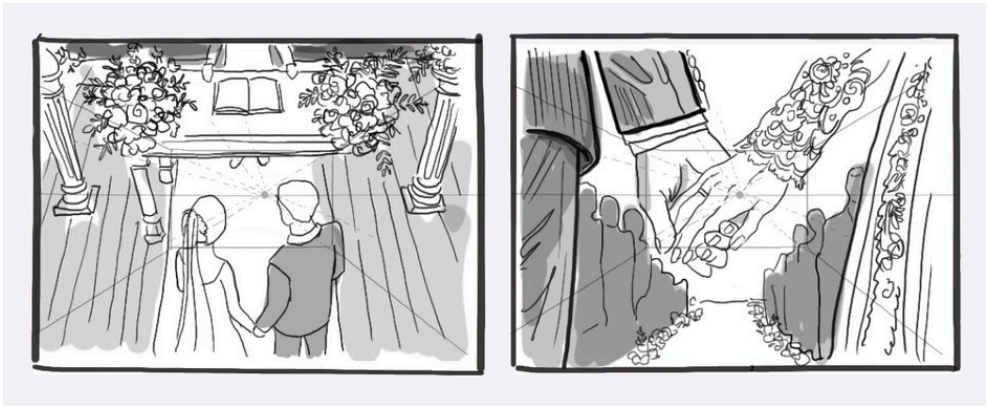
- Systems thinking is a holistic approach to analysis that focuses on how different parts of a system interact and influence one another within the whole.
- Rather than considering only how to solve an immediate problem, you consider how all of the pieces are connected to make the whole.

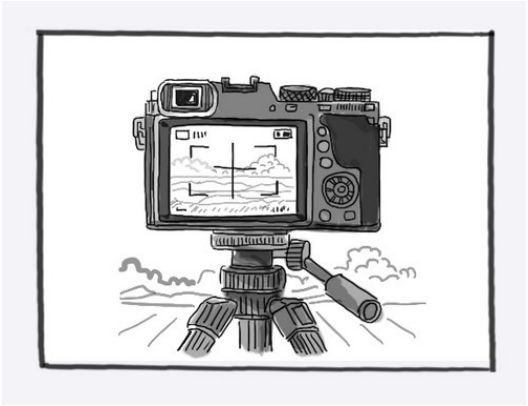
Examples of Systems Thinking

- **Product and service design** - uncovering user needs within broader experiences and ecosystems
- **Organizational challenges** - transforming workflows or structures to foster collaboration and innovation
- **Education** - improving learning outcomes by rethinking the entire ecosystem

Reframing







Putting this into practice

- What are my lenses?
- What assumptions am I making?
- What did I create or design that might be contributing to this situation?

Example Case

What are my lenses?

- "AI = cheating" lens
- "Polished writing = suspicious" lens
- "My job is to catch rule-breakers" lens

What assumptions am I making?

- Students using AI aren't learning
- Writing must be 100% original to have value
- Detection and punishment will solve the problem

What did I create or design that might be contributing to this situation?

- No clear guidelines about AI use
- Assessment focused on final product vs. learning process
- An adversarial relationship with students

Example Reframe

What perspectives am I missing?

- Students: Why are they turning to AI? What pressures do they face?
- Future Employers: What AI collaboration skills will graduates need?
- Other faculty: How do integrate this across the program?

What relationships and feedback loops do I see?

- Punitive policies → students hide AI use → less learning about ethical AI → more problematic use
- High-stakes grading → student anxiety → shortcut-seeking → AI overreliance
- Fear of AI → avoidance → missed opportunities to teach responsible use

What did I create or design that might have contributed to this situation?

- I created an ambiguous learning environment where students must guess at acceptable AI boundaries, leading them to make decisions without proper guidance or support
- I designed a system that rewards outcomes over learning, inadvertently teaching students that how they arrive at answers matters less than producing the 'right' result.
- I established a dynamic where students feel they must hide their struggles and questions from me, creating conditions where deception feels safer than transparency

Two-lane approach

Lane 1

- These are assessments *of* learning that measure and validate learning, assuring us and the community that graduates have achieved learning outcomes.
- Supervised, in-person assessments that verify individual student achievement.
  - Final Exam
  - Mid-term tests
  - In class
  - Placement, internship or supervision
- We need to carefully consider the implications this has on workload and accessibility.

Lane 2

- Unsupervised assessments that provide students with authentic opportunities to receive feedback on their learning using helpful resources or various technologies.
- AI should be purposefully incorporated, where helpful to support students in developing disciplinary knowledge and skills alongside AI fluency.
- The focus is on assessment *for* and *as* learning.
  - Practice or application
  - Inquiry or investigation
  - Production and creation
  - Discussion

	Lane 1	Lane 2
Role of assessment	Assessment *of* learning	Assessment *for* and *as* learning
Assessment security	Secured, in person	‘Open’ / unsecured
Role of generative AI	May or may not be allowed by examiner	As relevant, use of AI scaffolded & supported
Examples	In person interactive oral assessments; contemporaneous in-class assessments and skill development; tests and exams.	AI to provoke reflection, suggest structure, brainstorm ideas, summarize, literature, make content, suggest, counterarguments, improve clarity, provide formative feedback, etc.

U of T’s AI Taskforce Report

AI Literacy for All	Ensure every faculty, staff, librarian, and student has foundational AI fluency and can critically evaluate AI outputs.
AI Adoption Table (AIAT)	Create a standing, tri-campus committee to vet AI tools, approve high-impact pilots, and align use with U of T values.
AI Kitchen & Secure Data	Provide a secure sandbox with vetted tools and GPU resources for teaching, research, and admin pilots.
Human-Centred Oversight	Maintain human final authority for grading, peer review, and ethical decisions; transparent disclosure of AI use.
Equity & Sustainability Lens	Require environmental-impact and equity reviews for every AI tool or project before adoption.
Continuous Policy Refresh	Review and update all academic and administrative policies annually through an “AI lens” (integrity, privacy, IP).

Words matter

From AI is good at… vs. Humans are good at…

to we will always value humans doing…

From allowing or banning

to helpful or unhelpful

From levels of use

to epistemic agency

From evidence of cheating

to evidence of learning

From productive

to effective

From adopting AI

to steering and shaping education in the context of AI

Plan One Thing Activity

Plan One Thing Instructions (about 8 minutes)

- Create a rough sketch that shows your AI experiment.
- Include somewhere in your sketch:
  - **The One Thing:** What specifically will you try? Draw this prominently
  - **The Context:** Where/when in your course will this happen?
  - **The Why:** What problem does this solve or opportunity does it create?
  - **The First Step:** What's your very first action to test this?

Plan One Thing Instructions (about 6 minutes)

- Turn to your neighbour and share your sketches
- 3 minutes each

Plan One Thing Instructions

- Share ‘One’ thing that caught your attention

Q & A

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Robert Gillespie Academic Skills Centre

Thank You!

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Resources

- Two lane approach to AI
- Systems thinking
- U of T AI Taskforce Report
- U of T AI Taskforce Teaching and Learning Working Group Report