MDAO

What are Games?
→ Free
→ Separate
→ Uncertain
→ Unproductive
→ Governed by rules
→ Make believe

ALL artefacts are created with design methodology

end result — implementation
(iterate, question, quality)

Games are unpredictable

Rules = Mechanics
System = Dynamics
Fun = Aesthetics

→ each component is a view of the game

Types of Fun
- Sensation 🤚
- Fantasy ✗✗
- Narrative 📖
- Challenge 🚩
- Fellowship 👥
- Discovery 📘
- Expression 😊
- Submission 🕐

Games can have Multiple aesthetic goals

Aesthetic Models	Dynamic Models
discuss M + D	◦ create aesthetic exper
→ Compass	◦ avoid pitfalls
	◦ identify creative solutions

First Pass
→ Aesthetic goals
→ Mechanics

Second Pass
→ Dynamics
→ new aesthetics
→ refine mechanics

Third Pass
→ Total aesthetic shift
→ redesign
→ new metrics

Behavior Change
→ build self mastery

→ Attitude, subjective norms perceived behavioral control

Teaching
→ effective education
→ objectives
→ variable difficulty tasks
→ encourage practice
→ intrinsic + extrinsic rewards

Games are a cool way to learn

Outcomes
• Desired outcome central
  - Behavior
  - Attitude
  - Info
  - Aesthetics
  - Self-teaching
  - Explicit skills
  - Implicit skills

info vs behavior

Outcomes ⇄ Aesthetics
Outcomes → Dynamics
Dynamics → Mechanics
Mechanics → Dynamics

Mechanics
◦ actions behaviors & control mechanisms
◦ support dynamics

Tuning
◦ iteratively refine
◦ point out problems

Using MDAO
◦ Promote engagement
◦ Players share distinct shown goals
◦ balancing to create flow
◦ Apply Behavior change theories
◦ identify outcomes
◦ Strengthen inclination toward behavior
◦ challenges & message