# AI Adaptive Accelerated Curriculum Development & Student Engagement

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# Make a *CHEEZY* song About the lecture/workshop

Choral Version

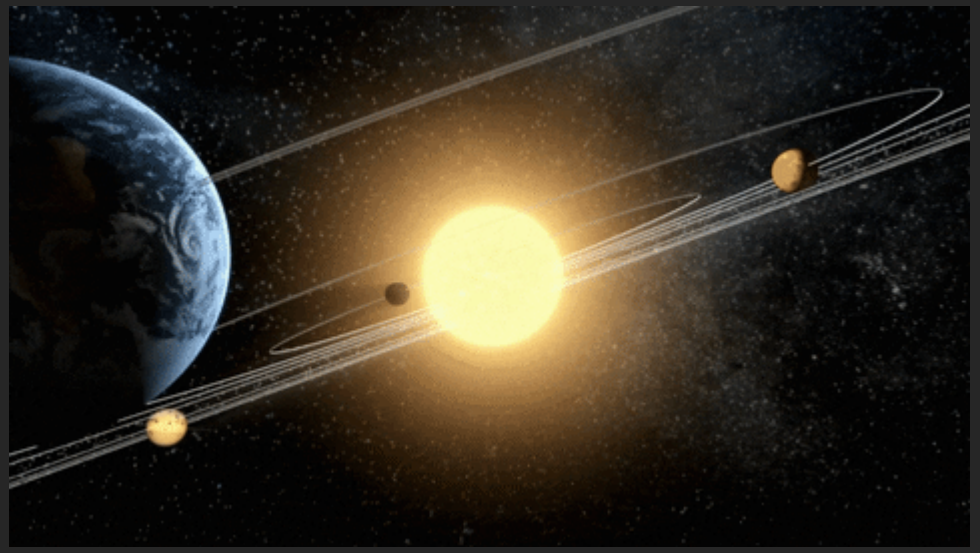
ChatGPT (in lab activities)


# Overview

Need for Accelerated Curriculum Development

Increasing Student Engagement

AI Curriculum Development



# **Why** Accelerated Curriculum Development

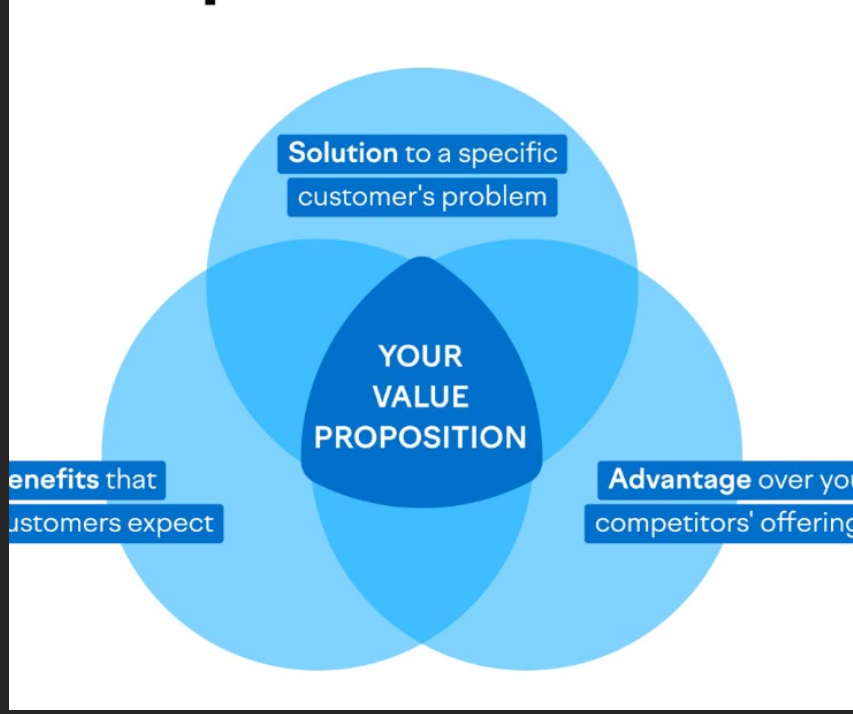
½ Life of Knowledge

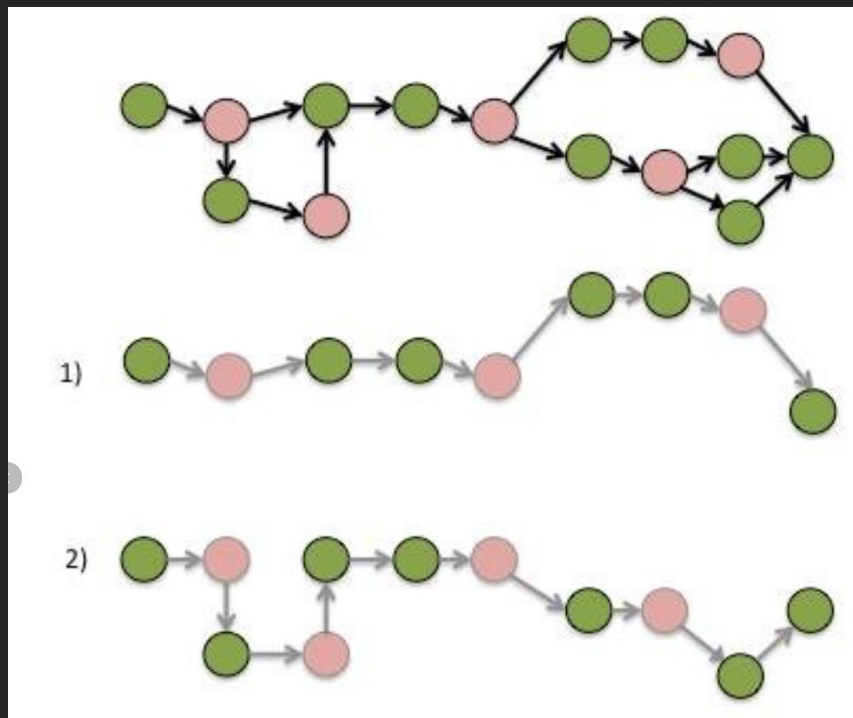
Higher Ed: Value Proposition

Multiple Choice

Learning Paths

Future Adaptive Curriculum



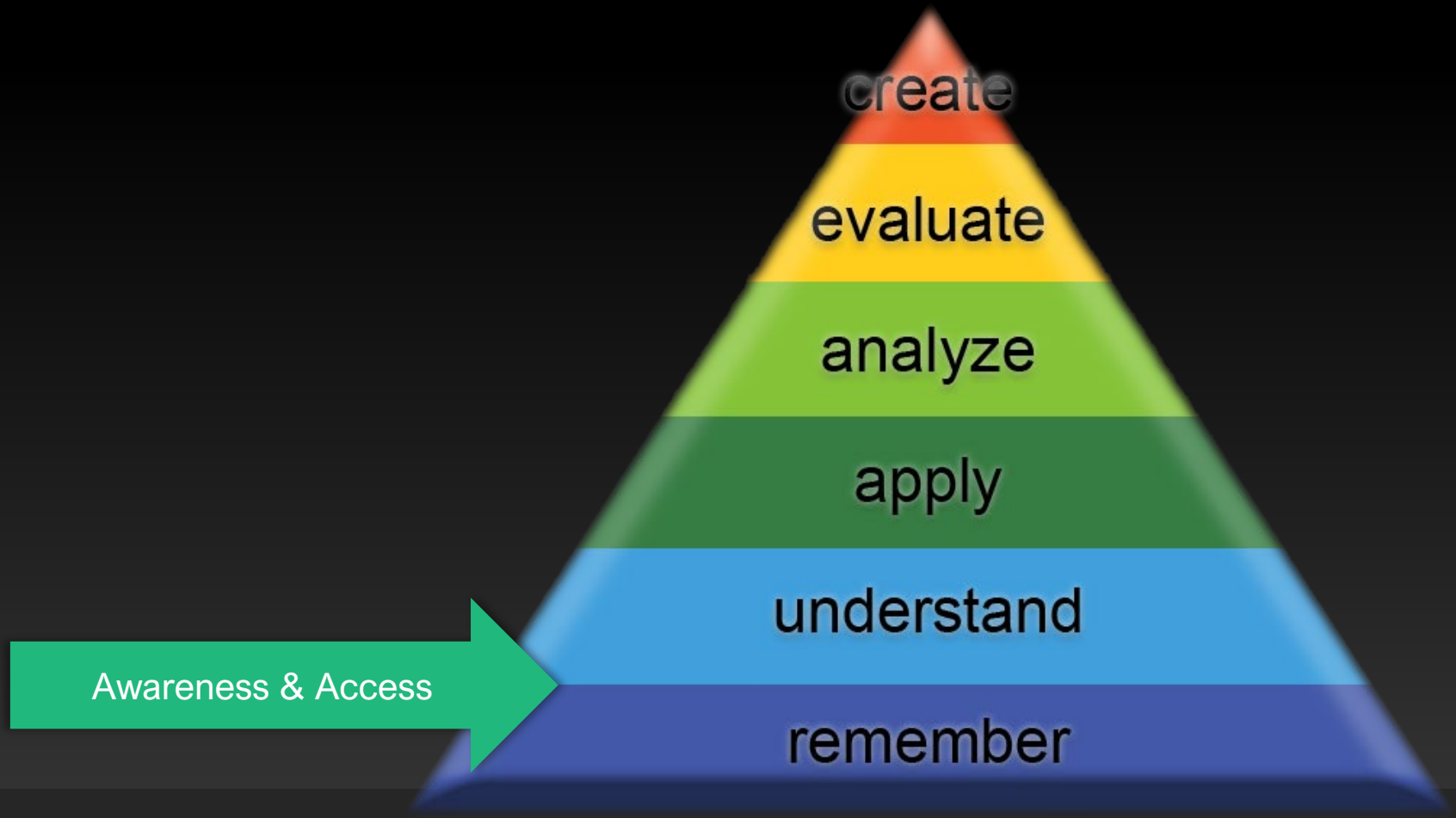
# 3D Digital Design: 3 Class Types:

Foundational

Transitional

Advanced / EDW combo

# Blooms Taxonomy is changing:

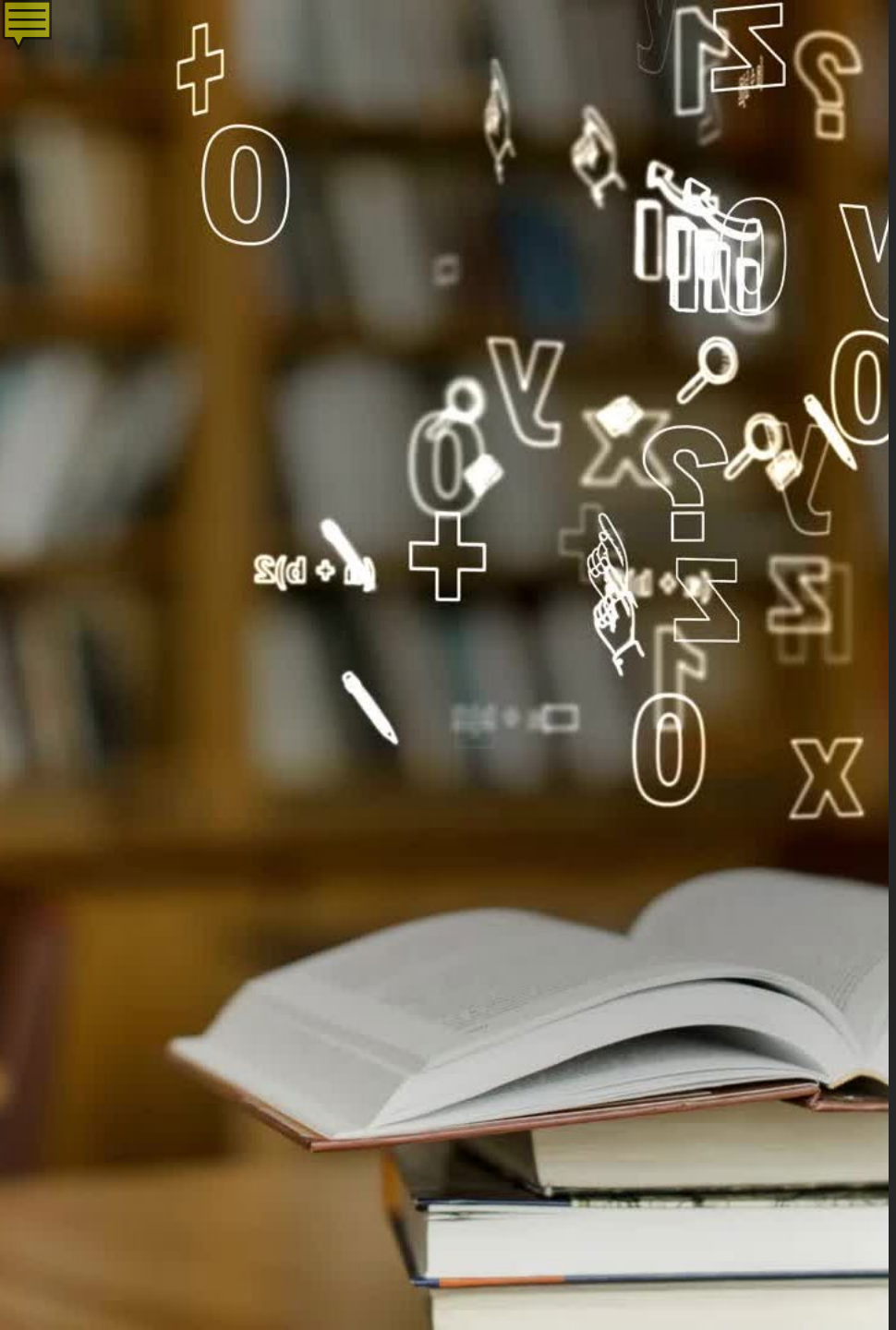


# AI: “Higher order” learning transition

More creation & Iteration

Shape probably not inverted triangle:  (Broader Base)


Engagement



# 8 AI Engagement Steps

1. **Review Background Knowledge**: Before diving into new material, **review key vocabulary terms and concepts**. connect to previously covered material

2. **Take Discussion (and other) Breaks**: are important They allow students to process information and maintain focus. (***Discuss*** AI and sense of "**Time**")

# 8 AI Engagement Steps

**3. Check In**: Use **questions, polls, or quizzes** to gauge comprehension.

Customize to students (shown in curriculum development)

* Have students semi-implement for themselves

**4. Slow It Down**: **AI Scaffold**. Quality matters more than quantity[1]. Support with “expansion and reinforcement”. Knowledge type (foundational) vs (advanced/changing)

# 8 AI Engagement Steps

5. **Record Elements with AI**: (with GetOtter)

Adding new Media may throw things out of ***balance***

Leading to some ***issues***

6. **Visual Aids**: images and graphics. Avoid text-heavy slides; GIPHY


# 8 AI Engagement Steps

7. Engagement with Students & Importance of Material

   **Discussion** | **Activities** | **Cross Media Connection**

8. **Be Yourself**: Authenticity matters. **Be genuine and passionate** about the subject. Enthusiasm to inspire and create a positive learning environment[1].

# Engagement Example:

From: Cinematography / Previz Class

**Lens Types**

# Lens Effect on Depth

17mm

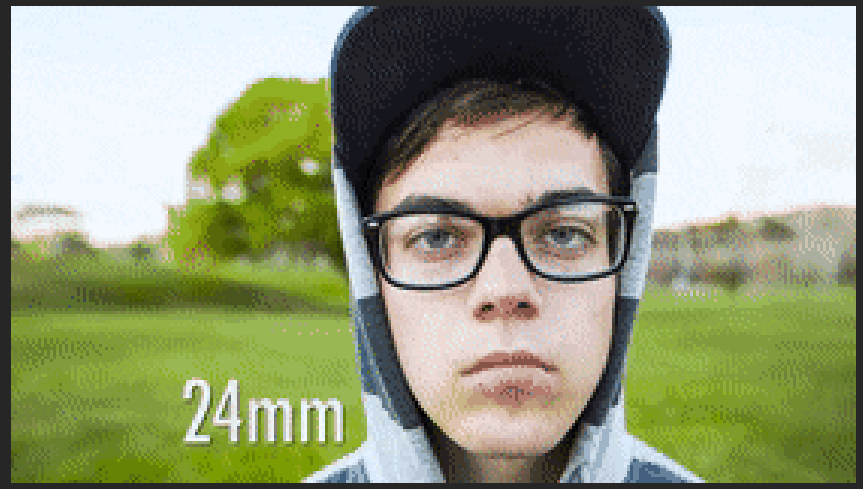
28mm

50mm

85mm


# Lens Effect on Depth

With AI:  Have AI generate a picture with 3 types of lenses



# Strong Visuals

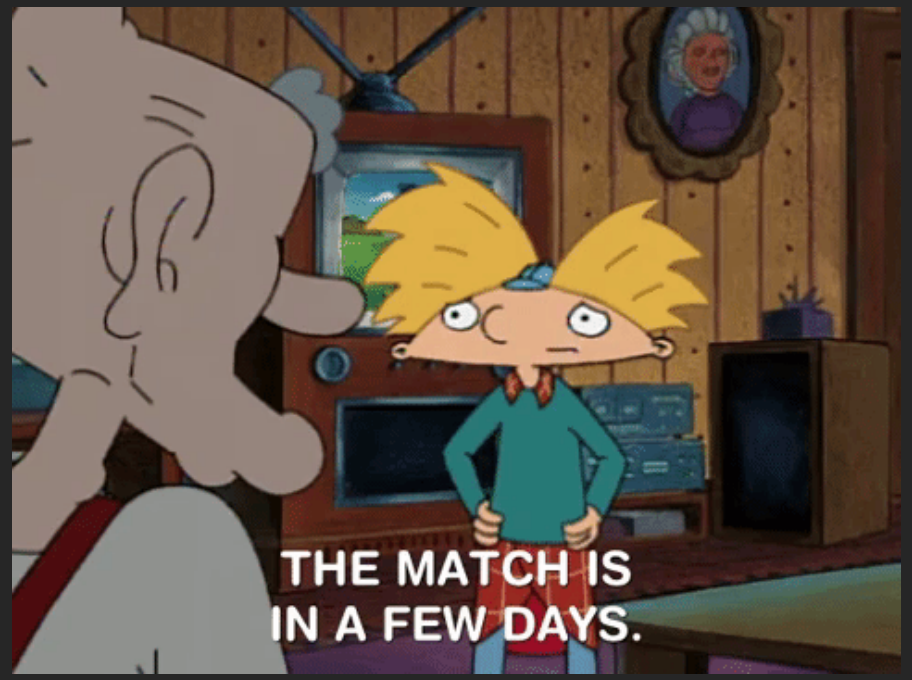
"Show vs Tell" (previous slide)

Ideas for visuals that will prompt discussion

Illustrate a concept

STUDENTS generate

Illustrations



# Lens Effect on Depth

With AI:  Have AI generate a picture with 3 types of lenses

please give me three of the exact same image of a city at the golden hour, with each image use a different lens; 20mm, 50mm, and 100mm

# Engagement Examples: ChatGPT please give me:

Teach Students how to learn *with* AI:

- Don’t jump in too quickly with AI
- X3 Prompt Requirement
- Use / Notes Comparison & Summary

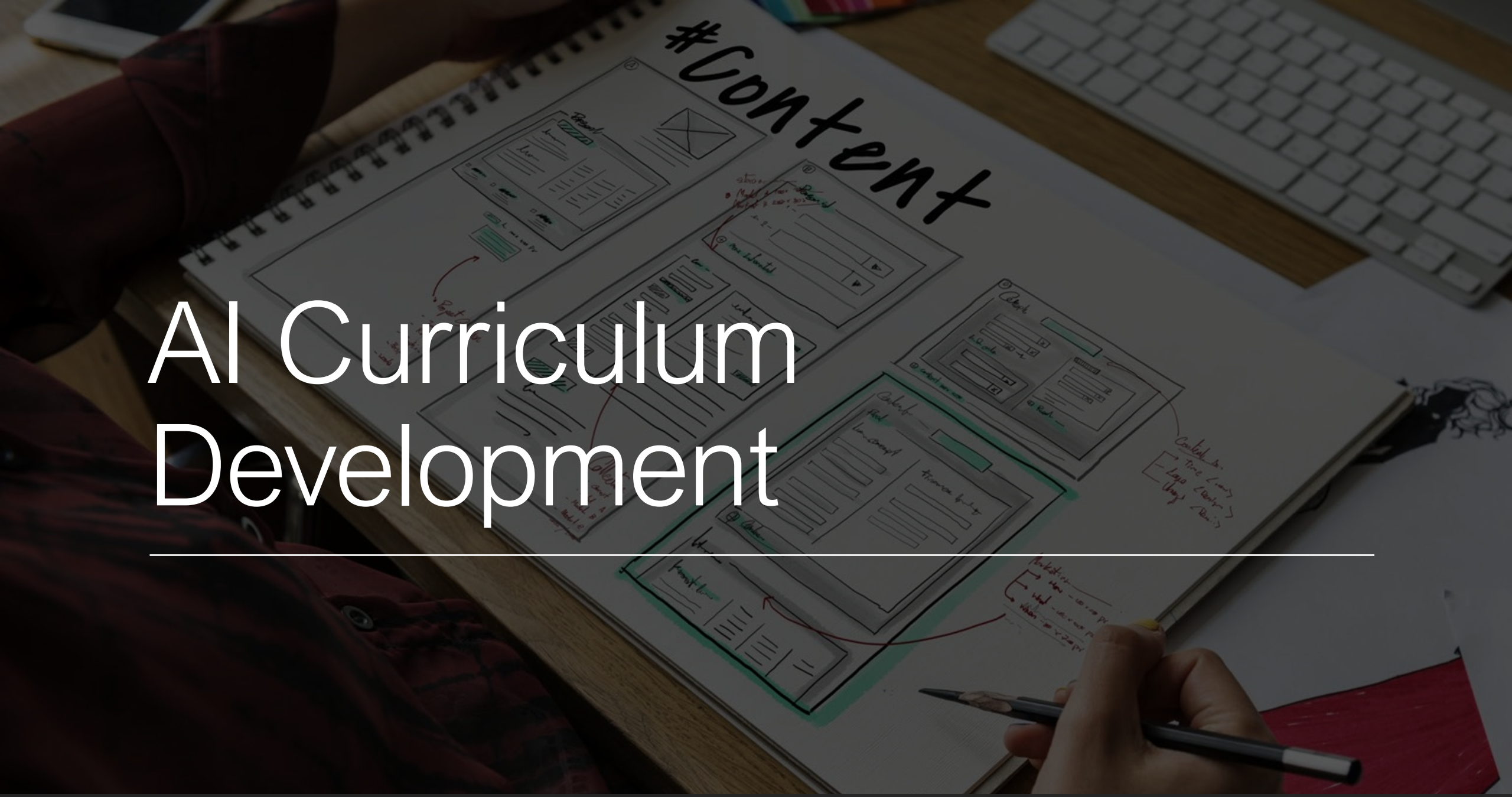
# Learn *with* AI:

Reinforcement (Summaries) / Gap Filling

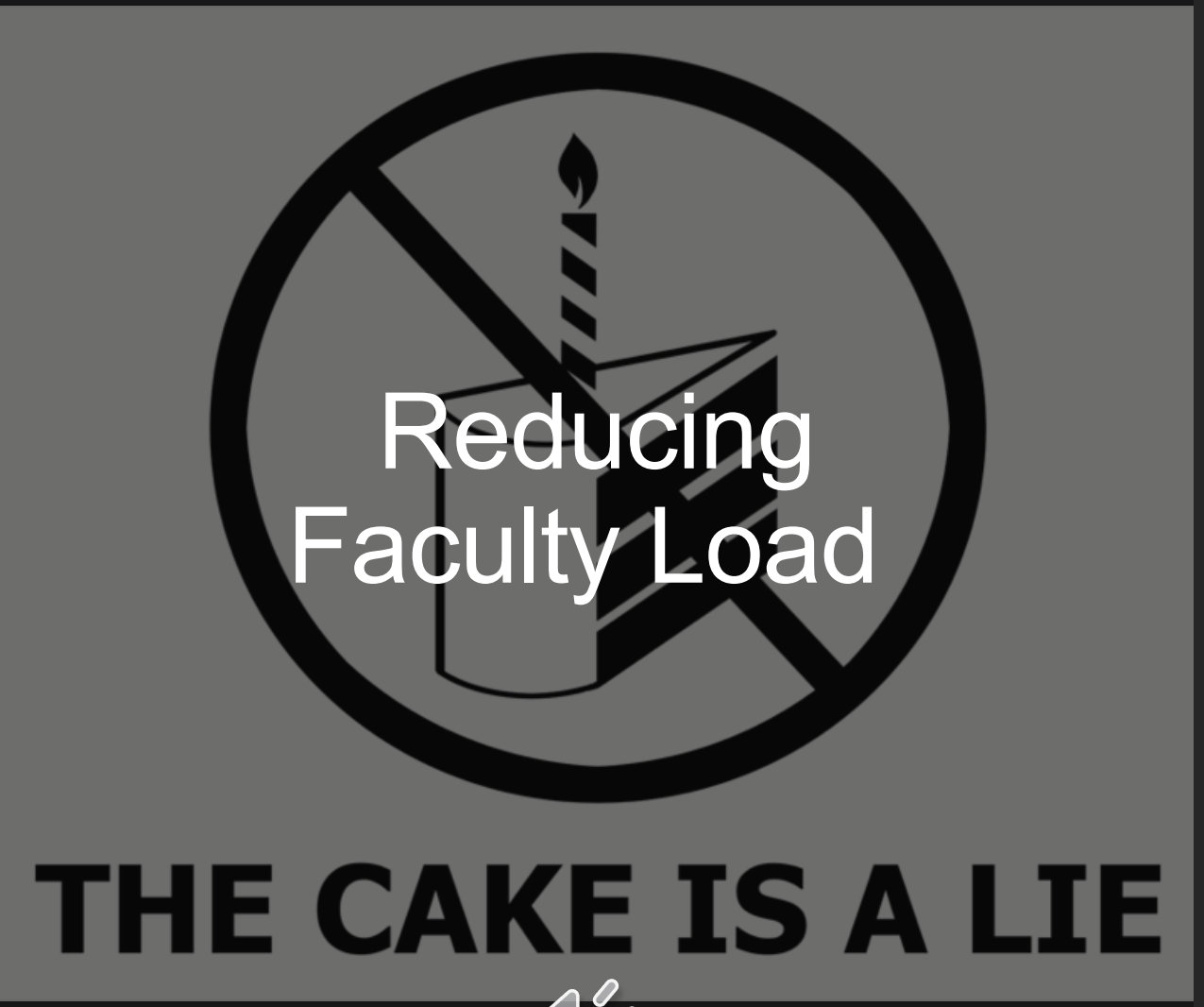
Stronger Engagement (**Discussions** | **Activities**)

Facilitate Group Process

- Don’t jump in too quickly with AI
- Use / Notes Comparison & Summary




# AI Curriculum Development




In the game Portal

An AI named GLaDOS promises you **cake**

if you accomplish a series of increasingly difficult tasks

# AI Curriculum Techniques

Quality

Speed

Cost

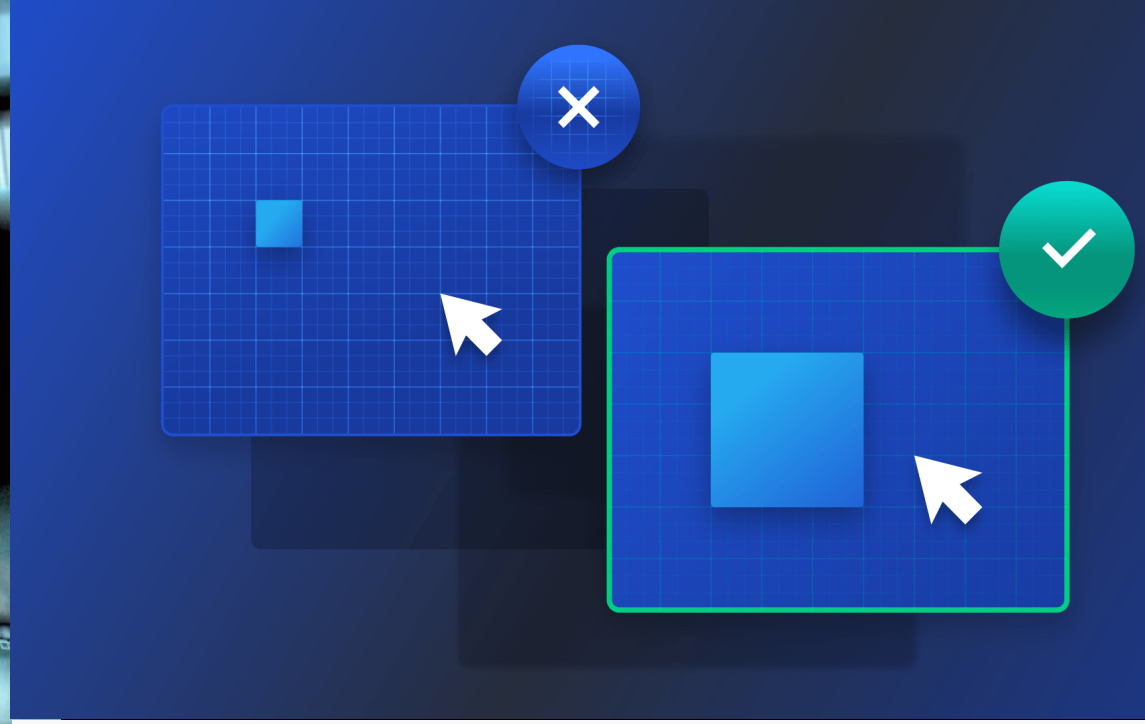
# Interface Speed

**Fitts Law**

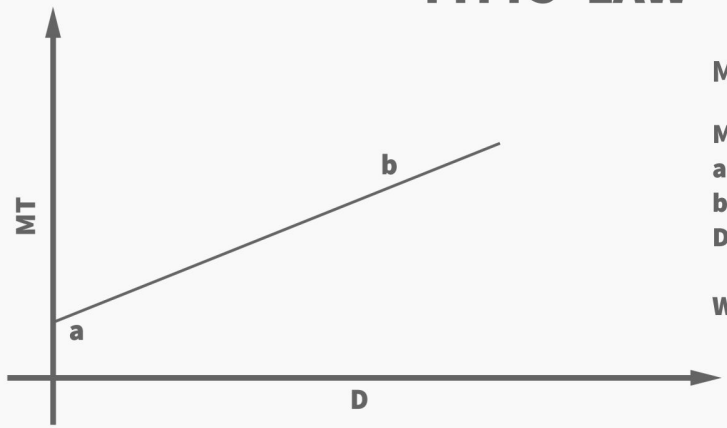
- **Hotkeys**
- **Voice**
- **Picture / Video**

Human ← → Computer

- Iteration
- Ideas
- Organization



## FITTS' LAW




$$MT = a + b \cdot \log_2 (2\frac{D}{W})$$

**MT** - The movement time
**a** - The intercept
**b** - The slope
**D** - The distance between the origin and the target
**W** - The width of the target

# Curriculum Redesign

Please give me a 14 week curriculum  (..Based On..)

Modules, Summaries, Projects, Rubrics

increasing / Decreasing emphasis on X

# Vocabulary Example

Generation

**Combination / Integration**

Blend with other technologies:

AR Example: Catchy Words


# AI Chatbot Integration

- Chat GPT 4 (is now free)
- GPTs (Chatbots you build) can be shared with non-commercial users

# Resources

CTL – Generative AI In Teaching

This Slide Deck: