Aligned AI: Balancing Goals, Engagement, and Support

Amanda Hardman, Senior Learning Designer
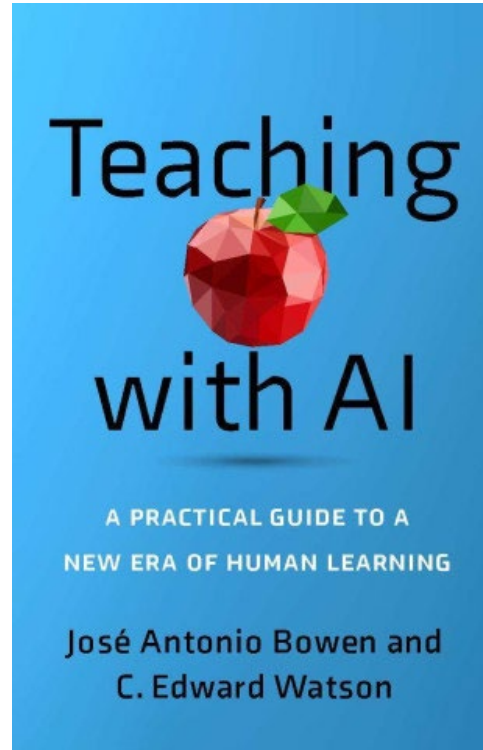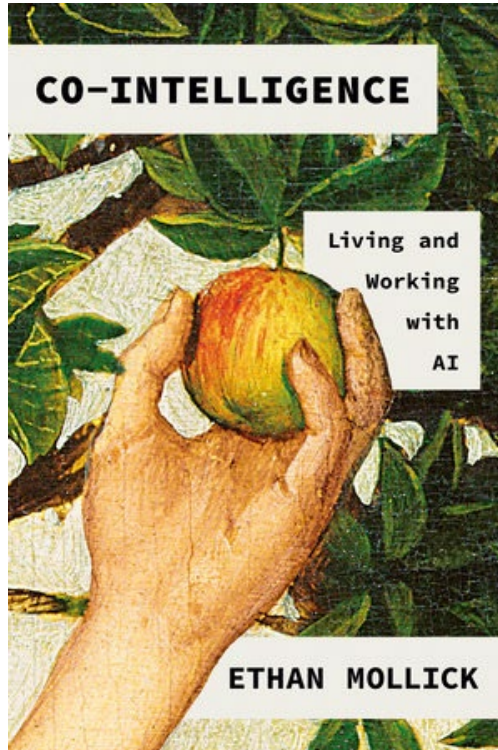
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Today's Goals

1. Identify facets of alignment pertaining to integrating generative artificial intelligence (Gen AI) into learning design.

2. Recommend strategies for supporting learner agency when encountering AI within a course design.

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AI Good Books

Mollick, *Co-Intelligence* **(2024)**

Bowen & Watson, *Teaching with AI* **(2024)**

Green Light

"[A Stoplight Model for Guiding Student AI Usage](#)," *Edutopia* (Mormando, 2023)

Important Issues We Aren't Discussing

- **Policy**
- **Ethics**
- **Privacy**
- **Bias**
- **Accessibility**
- **General purposes for AI in an online course**

The Angst

"I believe the cost of getting to know AI — really getting to know AI — is at least three sleepless nights." (Mollick, 2024)

UDL Engagement: Value of Play

Access

Design Options for

Welcoming Interests & Identities (7) →

- Optimize choice and autonomy (7.1) ›
- Optimize relevance, value, and authenticity (7.2) ›
- Nurture joy and play (7.3) ›
- Address biases, threats, and distractions (7.4) ›

[UDL Guidelines](#) Tiers of Support: Engagement Principle

Access	**Welcome** identities
Support	**Sustain** effort
Executive Function	**Emotional capacity** building

QM Alignment

"Critical course elements work together to ensure that learners achieve the desired outcomes."
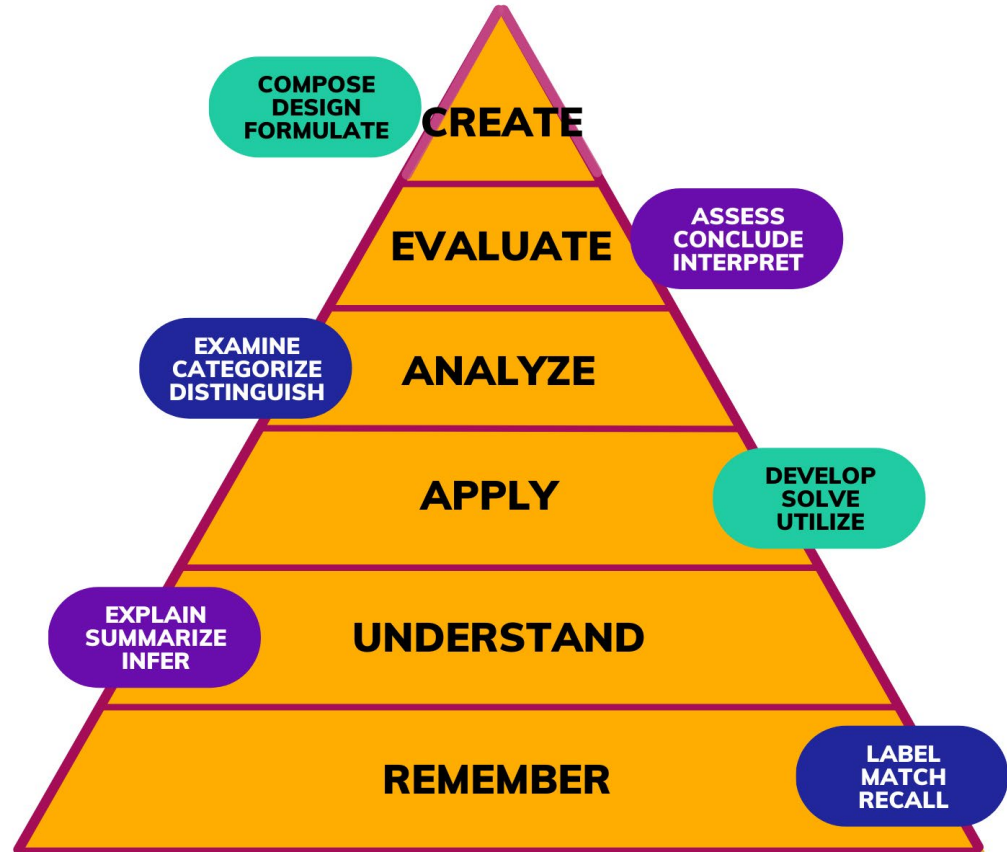
Alignment of Tools

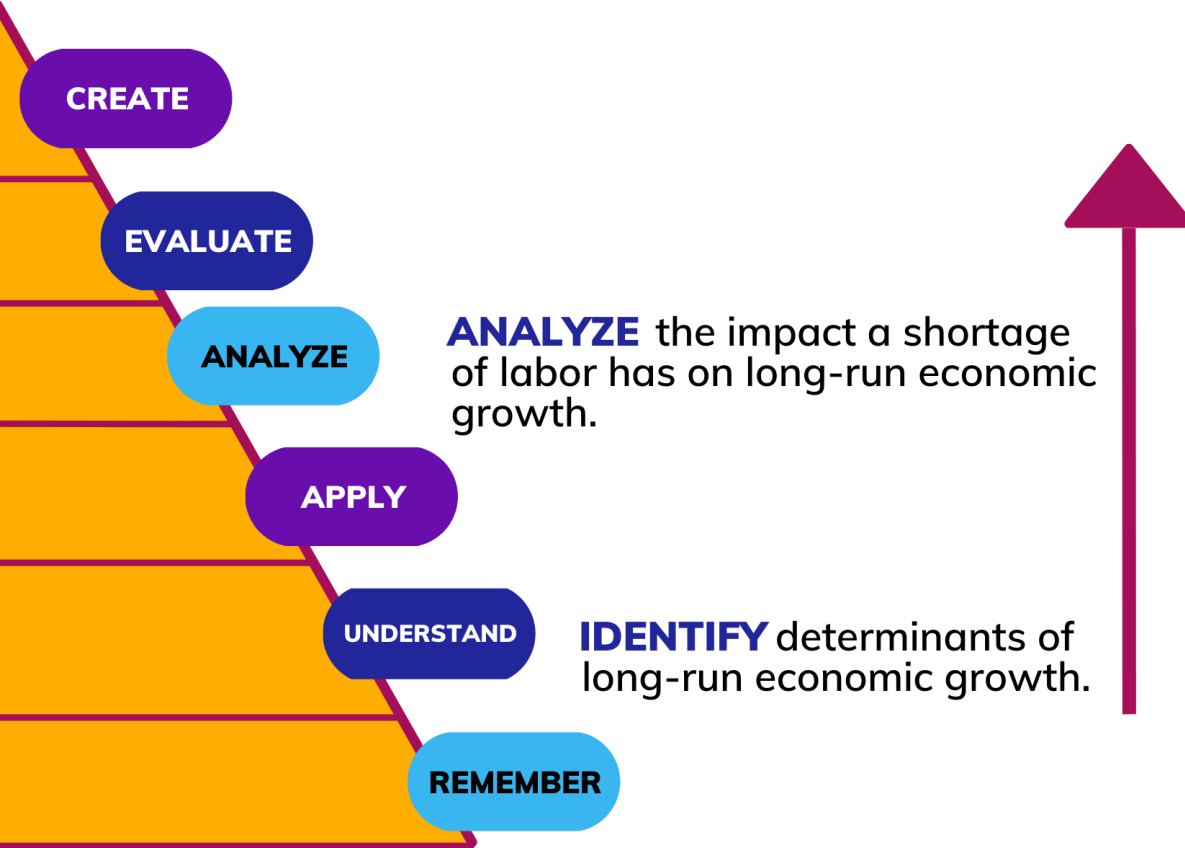SRS 6.1. The tools used in the course support the learning objectives or competencies.

"AI is a tool. Alignment is what determines whether or not it's used for helpful or harmful – even nefarious – ends." (Mollick, 2024)

BLOOM'S REVISED TAXONOMY

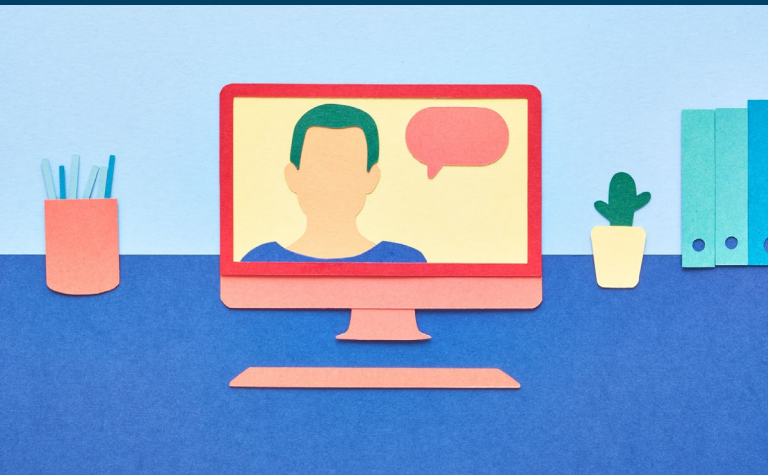Bloom's Taxonomy to Guide Objectives

COMPOSE DESIGN FORMULATE — CREATE

ASSESS CONCLUDE INTERPRET — EVALUATE

EXAMINE CATEGORIZE DISTINGUISH — ANALYZE

DEVELOP SOLVE UTILIZE — APPLY

EXPLAIN SUMMARIZE INFER — UNDERSTAND

LABEL MATCH RECALL — REMEMBER

COGNITIVE LEVEL OF MODULE OUTCOMES

CREATE

EVALUATE

ANALYZE

APPLY

UNDERSTAND

REMEMBER

ANALYZE the impact a shortage of labor has on long-run economic growth.

IDENTIFY determinants of long-run economic growth.

Example Objectives

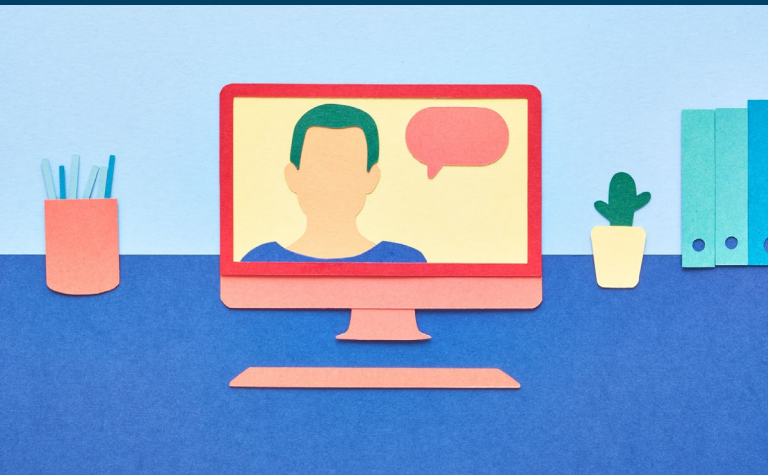**MLO 1.** Identify determinants of long-run economic growth.

Compare a learner-generated list with an AI-generated list

Learners prompt AI for an inaccurate list and identify/correct the errors

Self-assess with follow-up questions from the AI

MLO 2. Analyze the impact a shortage of labor has on long-run economic growth.

Learners prompt the AI for scenarios to analyze, in discussion or individually

Prompt AI for alternative perspectives or counterarguments to their original analysis

Prompt a role-play with AI

English Composition

Institutional course objective:

- Plan, write, revise, and review multi-paragraph compositions that stress analytical, evaluative, exploratory, and persuasive/argumentative writing within various rhetorical situations.

Unit 3 objectives:

- Review persuasive writing to critique and improve compositional choices.
- Integrate feedback to improve compositional choices.

AI Alignment

MLO: Review persuasive writing to critique and improve compositional choices.

MLO: Integrate feedback to improve compositional choices.

Unit 3 Essay

Learning Activity: ChatGPT feedback guided thinking activity

Tool: Generative AI (ChatGPT)

Human Alignment

"The key is to recognize the tasks that are meaningful and fulfilling for you as a human being and that you would rather not delegate or share with an AI system." (Mollick, 2024)

Enhance Alignment

Where are learners struggling or overspending their time when compared to the objectives?

Improve alignment by focusing where learners direct their cognitive effort.
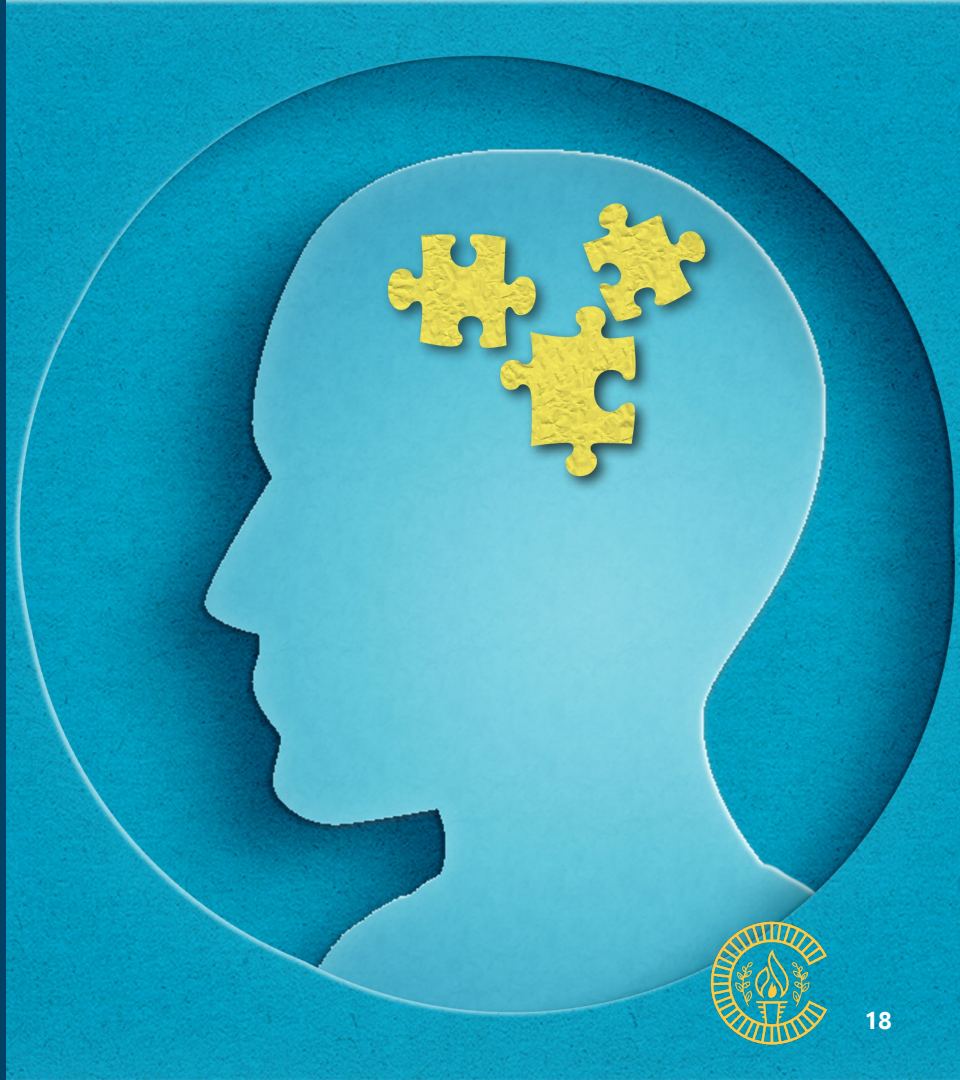
Universal Design for Learning

Course Objectives:

- Describe the principles and theory behind the Universal Design for Learning (UDL) framework.
- Analyze the impact of UDL on diverse learner populations.
- Apply UDL to create effective learning activities, assessment tools, and course materials.
- Implement UDL strategies to address learning design challenges.

Learner Profiles

Learners develop 3 [learner profiles](#) as the lenses through which they analyze a course and apply UDL-informed design strategies.
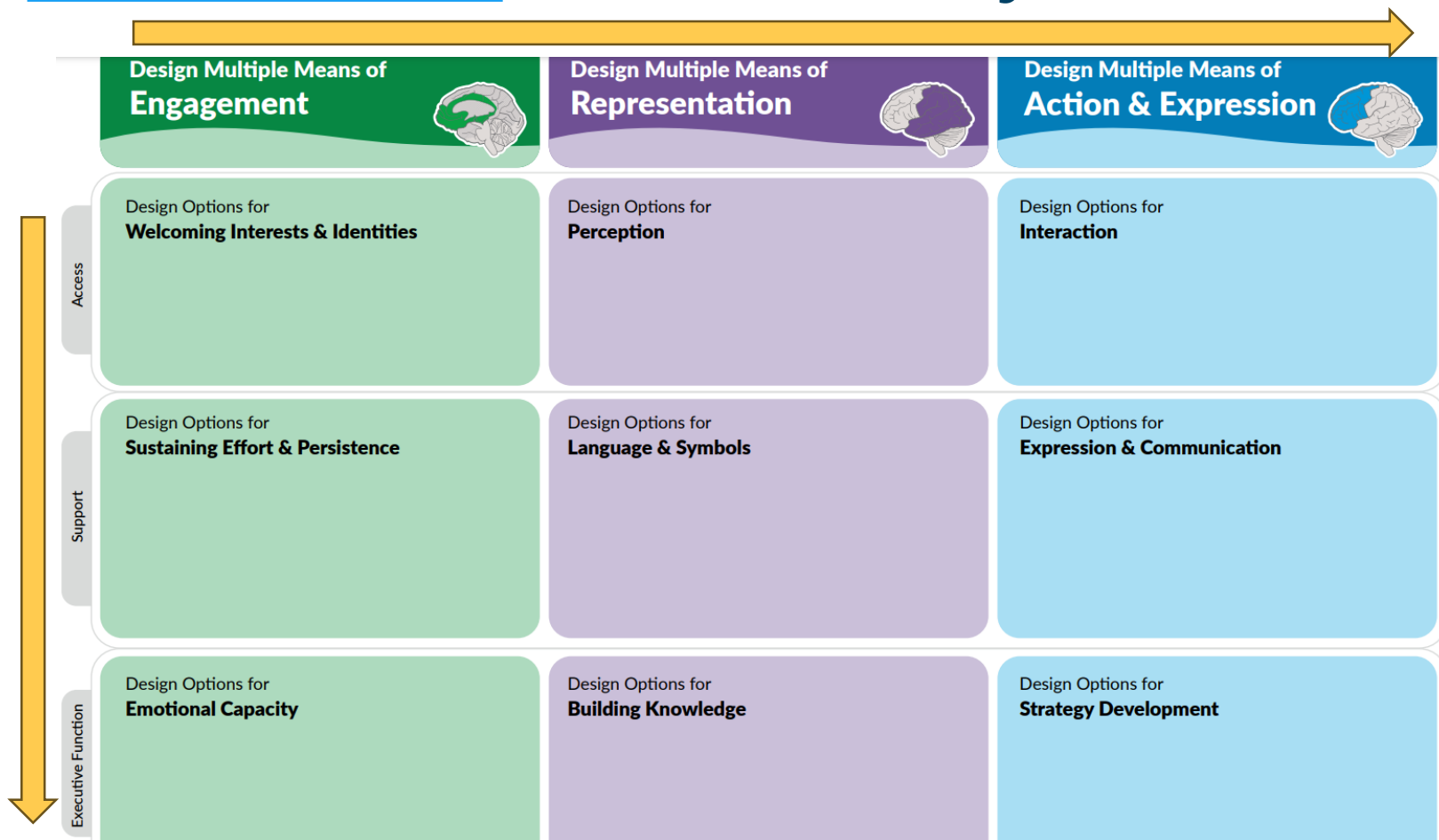
Learner Agency

"Ultimately, the goal of UDL is to support learner agency, the capacity to actively participate in making choices in service of learning goals."
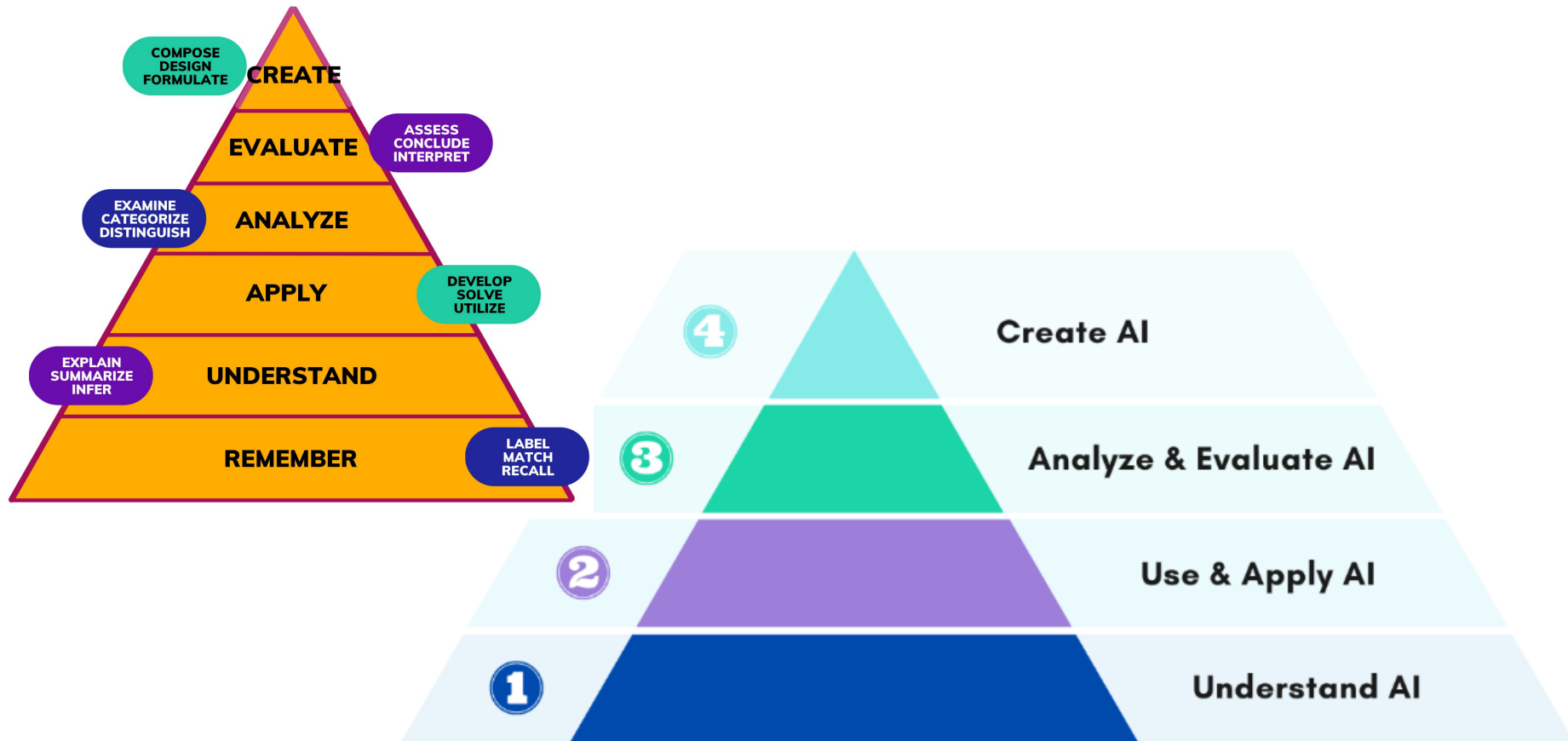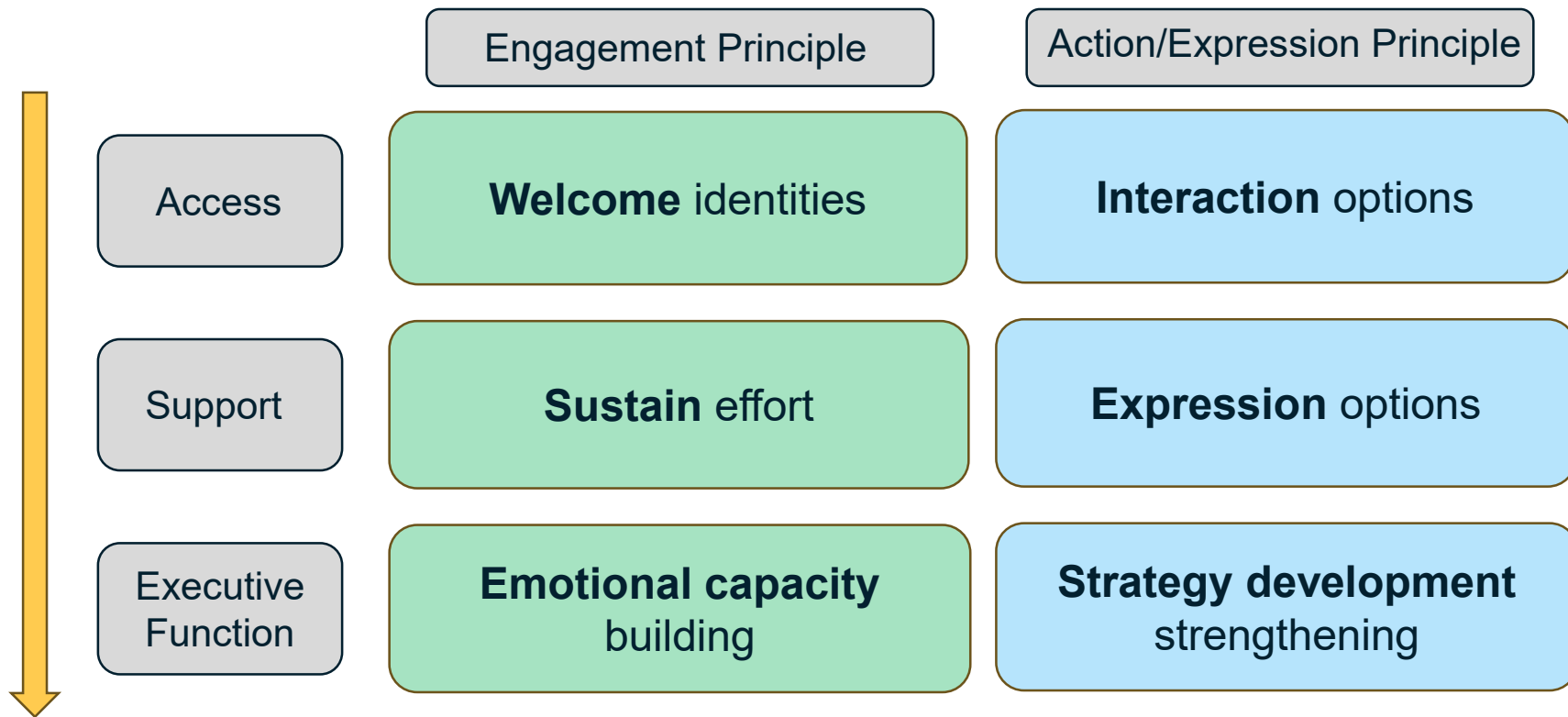
(CAST, 2024)

[UDL Guidelines](#) Version 3.0 (July 2024)

	Design Multiple Means of **Engagement**	Design Multiple Means of **Representation**	Design Multiple Means of **Action & Expression**
Access	Design Options for **Welcoming Interests & Identities**	Design Options for **Perception**	Design Options for **Interaction**
Support	Design Options for **Sustaining Effort & Persistence**	Design Options for **Language & Symbols**	Design Options for **Expression & Communication**
Executive Function	Design Options for **Emotional Capacity**	Design Options for **Building Knowledge**	Design Options for **Strategy Development**

Cognitive vs. AI Literacy Taxonomy

AI Literacy Framework, Melanie Hibbert, Barnard College

Supporting Learner Agency

	Engagement Principle	Action/Expression Principle
Access	**Welcome** identities	**Interaction** options
Support	**Sustain** effort	**Expression** options
Executive Function	**Emotional capacity** building	**Strategy development** strengthening

Engagement Support

Clear explanation of goals and learner-centered value

Options where possible

Experimentation is balanced with structure and support
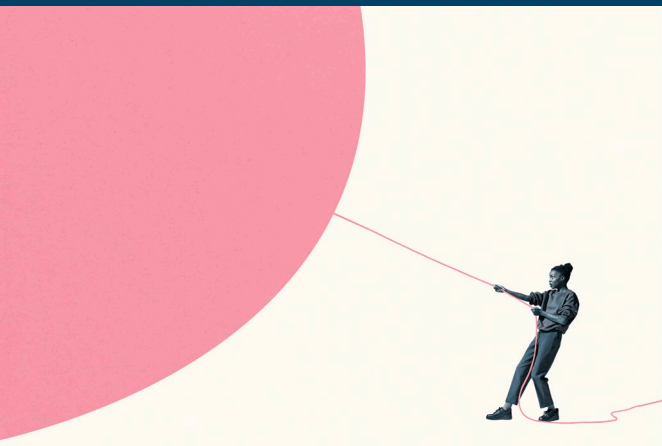
Emotional Regulation

Reflection prompts that prioritize the "human in the loop"

Opportunity to share results and process with others

Feedback that supports growth mindset and emphasizes process

Knowledge Building and Expression Support

- Templates for prompts and instructions

- Examples and applications

- Provide and connect learners to resources

Reflections?

Align Gen AI activities to learner needs as well as to objectives!

✉ Amanda.Hardman@cccs.edu