Differentiated Instruction Strategies

Presented by Stefanie Caswell
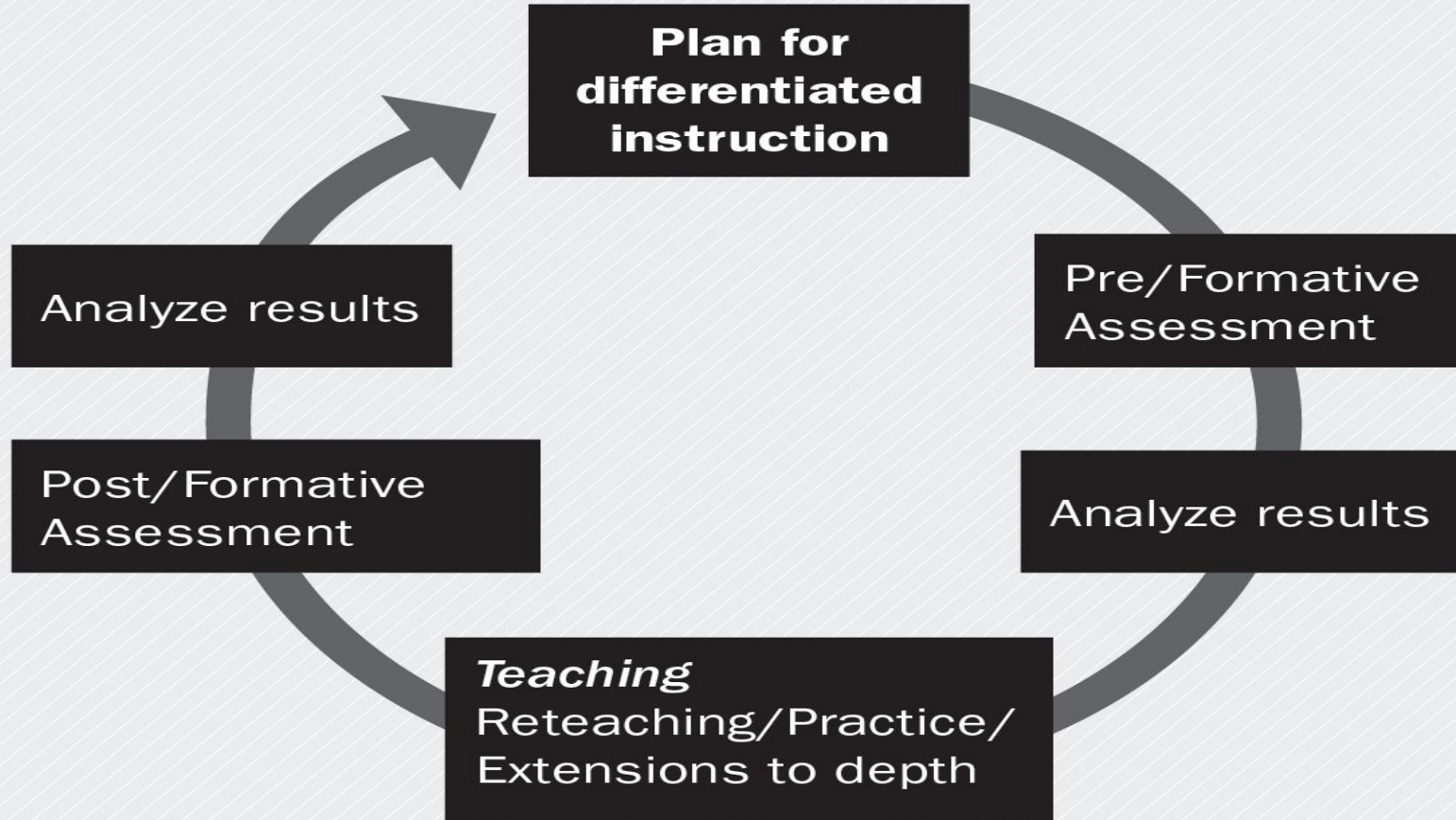
bit.ly/CVUSDElemDI

Differentiation means **tailoring instruction to meet individual needs**

The Integrated Assessment Cycle

Plan for differentiated instruction

Pre/Formative Assessment

Analyze results

Teaching Reteaching/Practice/Extensions to depth

Post/Formative Assessment

Analyze results

Advanced Cognitive Development: Requirement for Differentiation

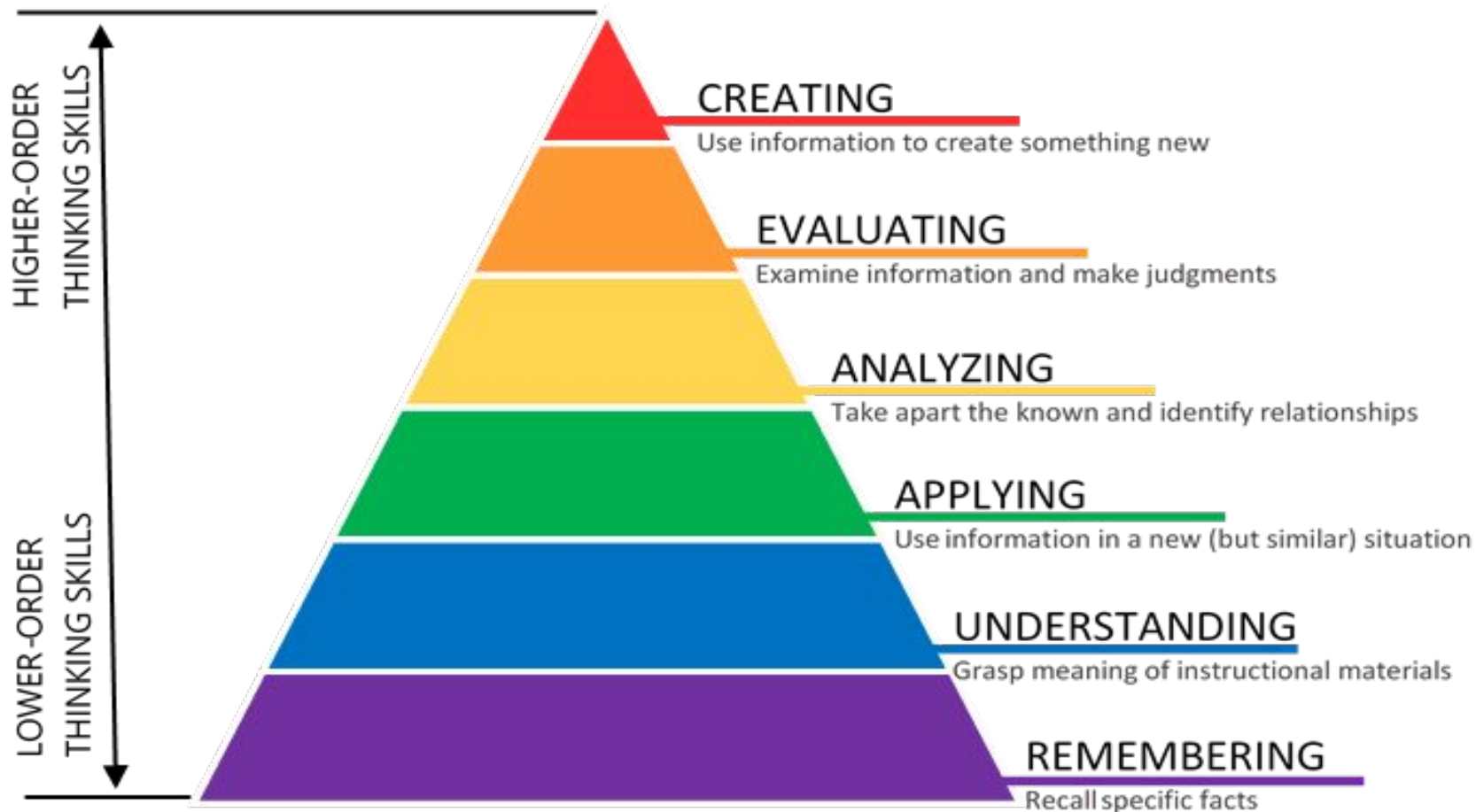**Pace:**
Accelerated instructional practice

Depth:
Increased discipline knowledge and practice

Complexity:
Sophisticated levels of advanced thinking

BLOOM'S TAXONOMY – COGNITIVE DOMAIN (2001)

HIGHER-ORDER THINKING SKILLS

LOWER-ORDER THINKING SKILLS

CREATING
Use information to create something new

EVALUATING
Examine information and make judgments

ANALYZING
Take apart the known and identify relationships

APPLYING
Use information in a new (but similar) situation

UNDERSTANDING
Grasp meaning of instructional materials

REMEMBERING
Recall specific facts

Bloom Chart: Money

	PROCESS	CONTENT	PRODUCT
CREATE	*Compile*	*Money*	*Timeline with Explanation*
	Compile a timeline displaying the "worth" of a U.S. dollar during each decade from 1950–2000 as it relates to the cost/quantity of milk, sugar, and gasoline. Predict the future pattern.		
EVALUATE	*Critique*	*Money*	*Speech or Essay*
	Critique the use of the United States money system as it compares to a system of barter or trade. Share your findings of support or disapproval in a speech or essay.		
ANALYZE	*Analyze*	*Money*	*Chart*
	Analyze various ways coins can be translated into dollar amounts and record your responses on a chart.		
APPLY	*Construct*	*Money*	*Story Performance*
	Create situations/problems that require change for $1, $5, and $10.		
UNDERSTAND	*Describe*	*Money*	*Discussion or Presentation*
	Describe the four major U.S. coins to the class to see if they can take turns guessing the coin you describe.		
REMEMBER	*List*	*Money*	*Poster*
	List the four major U.S. coins and tell how much they are worth on a poster.		

Language of the Discipline

- What vocabulary is used?
- What tools are used?
- What methods are used?
- What service is provided?
- What products are made?

Details

- Who..? What..?
- When…? Where..?
- Why…? How…?
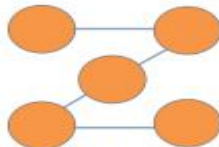
Patterns

- What patterns do you notice?
- Can you predict what will come next?
- Why do you think so?

Trends

- Identify cause & effect relationships
- What are influencing factors?

Unanswered Questions

- What words don't you understand?
- What is unclear?
- What information is missing?

Change Over Time

- What was it like in the past, the present & what might it be like in the future?
- What caused the change?

Ethics

- Who believes the behavior or action to be right or wrong and why?

Big Ideas

- What is the theme?
- Identify the "Big Idea", principle or generalization.

Depth & Complexity Icons
Use this page to guide discussions, as conversation "cues" during literature circles discussions, & as writing prompts to encourage critical thinking.
Shared by Sandra Kaplan

Multiple Perspectives

- Who agrees & disagrees?
- What are their opinions?
- Who believes what & why?
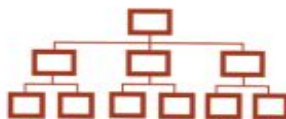
Rules

- What are the rules?
- How it is structured?

Across the Disciplines

- What common theme connects the topics?
- How is one topic like the other?

# DEPTH AND COMPLEXITY IN MATHEMATICS

DEPTH THINKING TOOLS

	Language of the Discipline: Vocabulary related to content or discipline being studied. Signs, symbols, abbreviations. $\neq$ $\geq$ $\div$ $\approx$ $\llcorner$ $\measuredangle$ etc.
	Details: Used to understand problems: discern patterns in algebra and reveal order of operations; How to factor- e.g. patterns of the exponents, signs. etc Also: Compare/order decimals: geometry and measurement, etc.
	Patterns: Recurring elements/factors; repetitive/ordered. Prevalent throughout mathematics. Allows for prediction. Factoring algebra/ fractions, decimals, percents; symmetry; statistics and data analysis, etc.
	Unanswered Questions: Information or ideas that are unclear, unresolved, or not fully developed. May include the unknown, unexplored or unproven.
	Rules: Organization elements that create structure, order or sequence. Prevalent throughout mathematics. Theorems/ laws (examine patterns of angles and lines to help determine the theorem/rule); number lines; place value; order of operations; geometry & measurement; steps for solving problems, etc.
	Ethics: Conflicts surrounding different points of view. May include bias, values, or judgments. Measurement (use of metric vs. customary units): decision-making: graphs/data collection and representation, etc.
	Trends: General direction of change (may be influenced by varied forces). Statistics and data analysis; graphing equations (as 'x' increases, 'y' increases exponentially).
	Big Idea: General statement or generalization about a principle, theory, concept or idea. E.g.- Patterns allow for prediction: Rules are revealed through patterns: Relationships serve a purpose: Order has a purpose, etc.

COMPLEXITY THINKING TOOLS

	Over Time: Change over time. May include comparing past, present and future, predicting, or connecting points in time. Statistics and data analysis.
	Multiple Perspectives: Different points of view/opposing viewpoints. Varied approaches to problem-solving/decision-making; statistics and data analysis; graphs, data collection and representation, etc.
	Across Disciplines: Connections within, between and across subject areas. May include connections, linked ideas, or integrations.
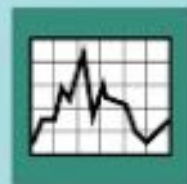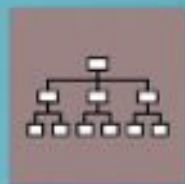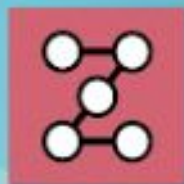
Differentiation Newsletters
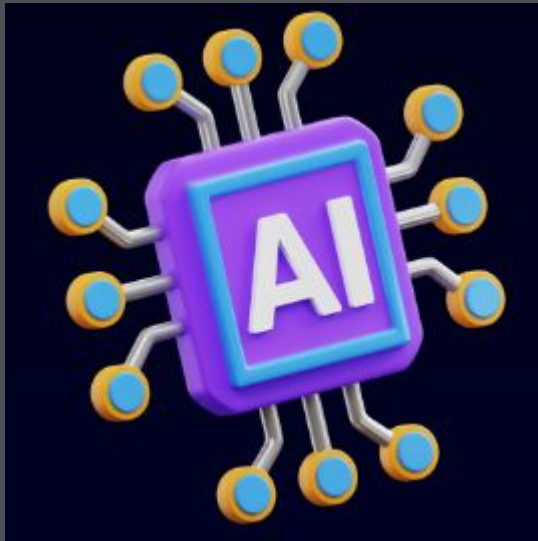
Inspiration in your Inbox

Andi McNair (Genius Hour)

Brydseed (Ian Byrd)

Gifted Guru (Lisa Van Gemert)

Differentiation "EASY" Buttons

Utilizing the power or AI as a "helping" tool…

30 AI tools to use in the classroom — DITCH THAT TEXTBOOK

Empowering Educators: Harnessing AI to Streamline Teacher Tasks
Presented By Haley Walker & Tammy Farhit CVUSD Tech TOSAs

CVUSD Professional Learning Hub 2023-2024

CRAFT a Power Prompt

CONTEXT

CONTEXT
Add clear, specific details to help the AI complete the task-
embedded throughout the prompt

ROLE

Role
Assign the AI a role for more targeted response
"You are an excellent 8th grade math teacher"

AUDIENCE

AUDIENCE
Provide details about the Audience
6th grade students, 8th grade parent, high school teachers

FORMAT

FORMAT
Output format, length, style, etc. Rap, Song, HTML, etc

TASK/TONE

TASK
What you want action you want the AI to do for you
evaluate, create, edit, revise,brainstorm, etc
TONE professional, friendly, caring, etc

Tapping into Interest...

Using student "passions to guide/elevate instruction and increase engagement

Interest Inventory

Interest Survey

Multiple Intelligences Checklist ("Answer Key")

Defining the Role of the Teacher

- **Mind-set shifter**
  - Shift students from a "fixed" mindset ("I can't because . . .") to a "growth" mindset ("I can because . . .").

- **Knowledge guide**
  - Prepare students to be generators of new knowledge by altering instructional approach from givers of information to coaches for and consultants of learning.

Defining the Role of the Student

- Goal setter

- Initiator of designing his or her own learning

- Developer of new knowledge, ideas, and products

Have questions?
Need ideas?
How can I help?

Email Stefanie Caswell