# **Depth and Complexity**

#### A Strategy for Thinking Skills and Differentiating the Curriculum

#### **Depth**

Depth refers to approaching or studying something from the concrete to the abstract, from the known to the unknown. It requires students to examine topics by determining the facts, concepts, generalizations, principles and theories related to them. It necessitates uncovering more details and new knowledge related to a topic of study. It encourages students to adopt perspectives and to see patterns in connections. Depth has eight major dimensions which are explained below.

Dimension	Explained	lcon	Key Questions	Thinking Skills
Language of the Discipline	Specialized vocabulary, names of skills or tasks, tools used		What words are specific to the work of the? (i.e. mathematician) (disciplinarian) What vocabulary words are new? What tools does the use?	Define Categorize Identify new words
Details	Attributes, parts, factors, variables	***************************************	What are its attributes? What features characterize this? What specific elements define this? What distinguishes this from other things? Who? What? When? Where? Why? How?	Identify traits Describe Differentiate Compare/contrast Prove with evidence
Patterns	Repetition, predictability		What are the reoccurring events? What elements, events, ideas, are repeated over time? What was the order of events? How can we predict what will come next?	Determine relevant vs. irrelevant Summarize Make analogies Discriminate same and different Relate
Trends	Influence, forces, direction		What ongoing factors have influenced this study? What factors have contributed to this study?	Prioritize Cause and effect Predict Formulate questions Hypothesize
Rules	Structure, order, hierarchy, explanation		What are the rules? How is this structured? What are the stated and unstated causes related to the description or explanation of what we are studying?	Generalize Hypothesize Judge credibility

Ethics	Point of view, different opinions, judging		What dilemmas or controversies are involved in this topic/study/discipline? What elements can be identified that reflect bias, prejudice, and discrimination?	Judge with criteria Determine bias Formulate opinions Identify conflict
Unanswered Questions	Discrepancies, missing parts, unclear ideas, incomplete ideas	???	What is still not understood about this topic/study/discipline? What is yet unknown about this? In what ways is the information incomplete or lacking in explanation?	Recognize fallacies, ambiguity Distinguish fact from opinion Formulate questions Identify missing info
Big Ideas	Generalization, principles, theories, main idea	M	What overarching statement best describes what is being studied? What general statement includes what is being studied? What is the main idea?	Identify the main idea Prove with evidence Generalize

## Complexity

Complexity involves asking students to make relationships and connect and layer concepts. It provides a why/how approach that connects and bridges to other disciplines to enhance meaning. Students learn to relate concepts and ideas at more sophisticated levels and see associations among diverse subjects or topics. They work to find multiple solutions from multiple points of view.

Dimension	Explanation	lcon	Key Questions	Thinking Skills
Changes Over Time	Between the past, present and future, and within a time period	THE SAN PARTY OF THE PARTY OF T	How are ideas related between the past, present and future or within a particular time period? How has time affected the information? How and why do things change or remain the same?	Predict Prioritize Relate Sequence Order
Multiple Perspectives	Multiple perspectives, opposing viewpoints, differing roles	8	What are the opposing viewpoints? How do different people and characters see this event or situation?	Argue Determine bias Classify Pros and Cons
Across Disciplines	With, between and across the disciplines		What are common elements among topics from the different disciplines? How does this topic/concept relate to other disciplines? How do topics/ideas from across the disciplines contribute meaning?	Relate Compare/Contrast Differentiate Synthesize Evaluate

### **Easy Ways to Implement Depth and Complexity**

An essential part of differentiating the curriculum through depth and complexity is using the icons, and ensuring that students are familiar with them.

- Look for the appropriate icon in daily content area lessons. "LOOK for (insert selected icon) in our lesson today on (insert content area of focus)."
- Use the Big Idea to summarize or end lessons.
- Label your daily agenda and lesson plans with the icons.
- Have students label work with the appropriate icons.
- Label classroom work and charts with icons.
- Post the icon posters in your classroom to prompt integration into discussions. Have a second set on the whiteboard tray to help students focus on individual icons during specific lessons.
- End a lesson with the following statement: "So what did the lesson tell us about the big idea: (insert focus generalization)?"
- Encourage students to study as a disciplinarian. Require students to use the language and skills of that discipline.
- Have students keep a response journal using some of the questions and prompts on the graphic organizers found elsewhere.
- Integrate the icons into worksheets to help students organize ideas.
- Encourage students to look at any topic from multiple viewpoints.

Remember that we are not teaching the icons, we are teaching concepts to new levels of depth and complexity using pictures to stand for the thinking strategies.