

How Parents can use the Critical Thinking Tools of of Depth and Complexity with their Students

Adapted from Educator to Educator Depth and Complexity Icons and Riverside Unified School District's GATE Program



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Depth and Complexity Thinking Skills

- Approach or study something from the concrete to the abstract, from the known to the unknown.
- Require students to examine topics by determining the facts, concepts, generalization, principles and theories related to them.
- Requires uncovering more details and new knowledge related to a topic of study.
- Encourages students to adopt perspectives and to see patterns in connections.
- Includes making relationships, connecting other concepts, and layering.
- Why/how approach that connects and bridges to other disciplines to enhance the meaning of a unit of study.

Depth and Complexity Critical Thinking Tools Usage

- GATE teachers use the critical thinking tools to extend the state academic content standards.
- These thinking tools are designed to guide thinking to a deeper and more complex level. They provide a means for students to exhibit abstract thinking, and help students to make interdisciplinary connections.
- Use of the thinking tools begins in second grade in order to develop critical thinking skills early in a student's academic career.
- Graphic representations (Icons) are used to represent each thinking tool, and are posted in GATE classrooms.
- Students are encouraged to label their work with the thinking tools they used.

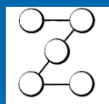
Depth Critical Thinking Dimensions with Icons



Language of the Disciplines: Specialized vocabulary, names of skills or tasks, tools used.



Details: Attributes, parts, factors, variables.



Patterns: Repetition, predictability.



Trends: Influence, forces, direction.



Rules: Structure, order, hierarchy, explanation.



Ethics: Points of View, Different Opinions, judging.



Big Idea: Generalization, principle, theory.



Unanswered Questions: Discrepancies, missing parts, unclear ideas, incomplete ideas.

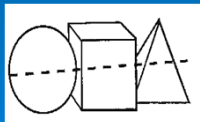
Complexity Critical Thinking Dimensions with Icons



Over Time: Looking at past, present, future, applying something historic to present knowledge, Applying from the past to present, noting change.



Multiple Perspectives: Different points of view, ways of seeing and reporting things, often dependent on time and place, affected by roles and responsibilities.



Across Disciplines: Multidisciplinary, Interdisciplinary connecting among disciplines, touching many subjects at once.

Support use of the Critical Thinking Tools in Conversations at Home:



- Ask your child to explain to you how they are using the critical thinking tools in the classroom.
- Ask your child questions while reading or watching television.
- Ask your child question even during sports viewing.

Ask Questions About the Classroom

- What *new idea* did you learn today?
 - What *details* would you use to describe this idea?
 - How is the new idea *related* to something else you know?
 - What *unanswered questions* do you still have about the new idea?



Ask Questions While Reading a Book or Watching Television



- What *patterns* of behavior do you notice in the character?
- How can the character be viewed from *different perspectives*?
- What are some *ethical* considerations portrayed by the character?
- What are the *trends* you noticed in this program?



Apply the Thinking Tools to Sports!

- **Apply the following to your favorite team or player:**
 - Identify and justify the five most **important details** about your team or player.
 - What **patterns** of play does your team or player repeat?
 - What is the **most important rule** in the sport? Justify your answer.
 - What **trends or predictions** can you make about your team or player?
 - What **questions** do you still have about your team or player?
 - How has your team or player **changed over time**?
 - Who is an expert on your sport? What is his **opinion** of your team or player?

