



Dr Frank Lyman's

ThinkTrix

Based on seven fundamental types of thinking, Dr Frank Lyman's **ThinkTrix** is a thinking skills strategy that uses a "Thinking Matrix" to develop thinking questions for any subject. With ThinkTrix, teachers and students generate **powerful questions** to enhance students' critical and creative thinking and deepen their understanding of the curriculum. ThinkTrix teaches students a simple and concrete system for **thinking, questioning and responding more thoughtfully** to classroom questions.

ThinkTrix Success

ThinkTrix was developed in 1978 by Frank Lyman, Charlene Lopez and Arlene Mindus. It was derived from analysing hundreds of samples of student work in an attempt to discover the cognitive content of graphic organisers. Since its inception, ThinkTrix has developed into a multifaceted thinking skills strategy and has enfranchised the minds of thousands of students from Prep to Year 12 and beyond.

ThinkTrix Literature Example

Charlie and the Chocolate Factory

Type of Thinking

Type of Thinking	Setting	Plot	Conflict	Character	Moral
Recall	?	Where did Charlie and the Chocolate Factory take place?			
Cause/Effect					
Similarity		How were Charlie and Willy Wonka alike?			
Difference					
Idea to Example			What are some examples in the book of the moral, "Greed is bad"?		?
Example to Idea					
Evaluation		?	Do you think the book has a good ending? Why?		

Top Uses for ThinkTrix

Teacher Question Generator

Using the variety in the ThinkTrix framework, teachers can be more sure their classroom questions and test questions address and develop students' skill in thinking critically and creatively.

Student Question Generator

Students are empowered to create their own curriculum questions. They can generate them on the spot for written response and/or cooperative interactions. Or they can generate and refine them as a team activity to send to another team to identify, discuss and reply.

Metacognitive Tool

Metacognition is the understanding of one's own thinking process. The seven fundamental thinking types, or "mind actions", are meant to be taught to students. They are defined in terms even primary students can understand and can be learned easily through multiple examples.

Communication Tool

Language can be a barrier to thinking. If students don't know what a question is asking, the subsequent answer will not utilise the appropriate type of thinking. For example, if students know that "effect" and "similarity" relate to "hypothesis" and "compare", they will be more able to know how their minds should work to analyse a question or a problem.

Thinking + Matrix = ThinkTrix

ThinkTrix is a "thinking matrix" for developing a range of thinking about any subject. On the vertical axis of the matrix are seven fundamental types of thinking. On the horizontal axis are the Focus Areas of the subject. At the intersection of the Type of Thinking and the Focus Areas, thinking questions can be crafted. Each cell in the matrix is a prompt for students or teachers to create a range of thinking questions to develop student thinking skills and respond more critically and creatively to the curriculum.