Strategies to Encourage Critical and Creative Thinking

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Critical and Creative Thinking....what do those terms mean?

• Critical Thinking

• Creative Thinking
Critical and Creative Thinking are interrelated processes essential to problem solving.

- Creative thinking involves constructing something new
- Critical thinking involves logic and reasoning skills

As we solve problems, we navigate between both thinking patterns across all disciplines.
- A facility for working with analogies gives students a structure for generating creative ideas, seeing complex relationships, and making unusual comparisons.
- Analogies may be used to deepen understanding of topics or concepts.
How many examples can you give of how this word has been used, beyond its literal definition?

MARATHON
• Friendships; Electrical circuits
• Words; Gardens
• Government; Blueprint
• The writing of the Declaration of Independence; The building up of a thunderstorm

• The PMI strategy encourages students to think about many possibilities and to explore the positive and negative aspects of ideas, events, or activities.
• PMI encourages students to look beyond the polarity of “yes or no,” “wrong or right,” and “my answer or your answer.”
• The goal of PMI is to develop independent thinkers who consider a range of ideas and possibilities to see beyond the obvious.
PMI Strategy

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<th>MINUS</th>
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Concept Development

- List examples.
- Categorize.
- Categorize another way.
- List non-examples.
- Generalize.
Change may happen naturally or be caused by people.

Change is linked to time.

Change is everywhere.

Change may be positive or negative.

Change may be perceived as orderly or random.
Fluency: Thinking of and listing many ideas
- Generate
- Recall
- Brainstorm
  - May use mindmaps, lists, wordsplashes, flowcharts...

Originality: Coming up with unique ideas
- What is an unusual way to...
  - Think of a unique solution to...
  - What if there were no limits/constraints?

Flexibility: Thinking from different perspectives
- Look from different lens
- What if there were no...
  - Change the ending
  - Take a different path

Elaboration: Building upon an existing ideas - adding details
- What else?
- Tell me more
- Explain
- Add detail
- Improve upon...