

Overview of Three Thinking Styles

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3 Styles of Thinking

• Analytical:

 Analyzing, Judging, Evaluating, Comparing & Contrasting and Examining

Creative:

 Creating, Discovering, Producing, Imagining and Supporting

Practical:

Practicing, Using, Applying and Implementing



Individual Differences

• All of us have a preferred style of thinking

We do not only use one style exclusively

 Different situations call for different kinds of thinking

 Everyone has some combination of analytic, creative & practical thinking skills



Individual Differences

- The same basic set of thinking skills underlie all three thinking styles
 - Analytical thinkers are adept at familiar and academic kinds of problems
 - Creative thinkers are adept at relatively novel problems
 - Practical thinkers are adept at everyday problems



Potential Characteristics of Analytical Thinkers

Likes school

Follows directions

Natural Critic

Often prefers to be given directions



Potential Needs of Analytical Thinker

- Assignments that require thought as opposed to memorization
- May have difficulty presenting ideas in a non-argumentative way
- May have difficulty with "creative" assignments
- Opportunities to work through openended questions with no right/wrong answer



Potential Characteristics of Creative Thinkers

Likes to come up with their own ideas

May not like to follow directions (or be rushed)

Natural "ideas" person (sees world from a unique perspective)

Self-directed



Potential Needs of Creative Thinkers

 Open-ended assignments with some structure

Support meeting deadlines/timelines

Support working with other students

• Frequent outlets for creativity



Potential Characteristics of Practical Thinkers

Likes to know what use tasks and directions serve

Likes to apply ideas in pragmatic fashion

Natural common sense



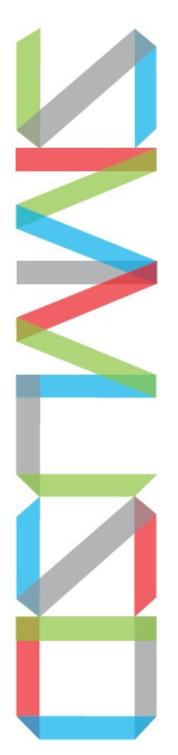
Potential Needs of Practical Thinkers

Hands-on activities

Connect assignments to the real world

 Support with completing activities that they do not see an immediate application for

Opportunities to lead



Good Thinkers Figure Out:

What it is they are good at

What it is they are not good at

 What they can do to make the most of their strengths while remediating/ compensating for their weaknesses



Higher Order Thinking Skills

- Problem Identification: Recognizing that you have a problem and defining what the problem is
- Process Selection: Steps to solve the problem
- Representation of Information: Both internally and externally
- Strategy Formation: Sequencing the processes and representations of the previous two skills



Higher Order Thinking Skills

- Allocation of Resources: Time spent on various components for optimal performance
- Solution Monitoring: Keeping track of what is done, what is currently being done and what still needs to be done
- Evaluating Solutions: Being sensitive to feedback and turning feedback into action



Depth Of Knowledge Levels

The Depth & Complexity of the knowledge in a content standard as well as how deeply a student needs to understand the content for a given response

• Level One: Recall

• Level Two: Skill/Concept

Level Three: Strategic Thinking

Level Four: Extended Thinking



Teaching/Evaluating Analytical Thinking

We ask students to:

- Compare & contrast
- Analyze
- Evaluate
- Critique
- Ask why
- Explain why
- Explain causes
- Evaluate assumptions



Teaching/Evaluating for Creative Thinkers

We ask students to:

- Create
- Invent
- Imagine
- Design
- Show how
- Suppose
- Say what would happen



Teaching/Evaluating for Practical Thinkers

We ask students to:

- Apply
- Show how they can use something
- Implement
- Utilize
- Demonstrate how in the real world



Example Tasks: Fractions

• Analytical:

 Your Dad needs a very clear step by step explanation of how to divide fractions. Create one.

Creative:

 Develop a new way to teach your Dad how to divide fractions.

Practical:

 Show your Dad why he needs to know how to divide fractions in his daily life.



Example Tasks: English/Language Arts

• Analytical:

 Choose a short story with a believable plot, logical sequence of events and a convincing resolution. Provide specific support for your positions.

Creative:

 Create an original short story with a believable plot, logical sequence of events and a convincing resolution.

Practical:

• A local radio station will be airing original short stories written by 10th grade students. Create an original story with a believable plot, logical sequence of events and a convincing resolution.



Common Pitfalls of Good Thinkers

Everyone fails sometimes

 When solving problems there are usually more ways to fail than succeed

The sign of a good thinker is not never making mistakes, but learning from those mistakes



Common Pitfalls of Good Thinkers

- Lack of motivation
- Lack of Impulse control
- Lack of perseverance & perseveration
- Using the wrong abilities
- Inability to translate thought into action

- Lack of product orientation
- Inability to complete tasks and follow through
- Failure to initiate
- Fear of failure
- Procrastination



Common Pitfalls of Good Thinkers

- Misattribution of blame
- Excessive self-pity
- Excessive dependency
- Wallowing in personal difficulties
- Distractibility and lack of concentration
- Spreading oneself too thin or too thick

- Inability to delay gratification
- Inability or unwillingness to see the forest for the trees
- Lack of balance between thinking styles
- Too little or too much self-confidence



A Few Final Thoughts

• How well you use what you know is more important than what you know

• What really matters in the world is not the level of one's intelligence, but what one achieves with this intelligence

Encourage students to formulate problems for themselves



A Few Final Thoughts

 Our goal should be to teach students to be good thinkers, both inside & outside of school

There is more to success than higher order thinking

There are different ways of being smart and different ways to use the thinking skills we have



References

- Curry School of Education. TriMind: Differentiating for Sternberg's Thinking Styles. http://curry.virginia.edu/uploads/ resourceLibrary/nagc_tri-minder.pdf
- Sternberg, R. J., & Spear-Swerling, L. (1999).
 Teaching for Thinking. Washington DC.
 American Psychological Association
- West Virginia Department of Education. Understanding Depth of Knowledge. https://wvde.state.wv.us/teach21/ documents/ UnderstandingDepthofKnowledgeppt.ppt