



Critical Thinking by Jerrell Forman

Think you might want to read this book?

Think this book is only for teachers to guide others in critical thinking? Think again! [Critical Thinking](#) takes the reader through all the ways deep cognition helps in life... including in leadership! Want to be aware of your biases? Check! Want to unpack the proper sequence of Socratic questions? Check! Want to learn more about all the ways thinking helps and hurts us in life? Check. If you want to

think more profoundly about thinking and how it might improve your classroom or school, then this is a great book for you.

What would Socrates ask?

- What fallacies should be taught to students so they can analyze effectively?
- How often are Socratic Seminars a part of learning at your school?
- How are questions received in classes? Faculty Meetings? Administration Meetings?
- How do we confront student biases so that it leads to reflection and growth?

Research

- Rapid eye movement (REM) sleep significantly enhances your brain's functions, and it can help you become much more creative.
- Developments in neuroscience now show that biases are formed as we grow up, meaning that we start to develop biases from childhood.

Concepts

- Occam's Razor- when encountering a problem or something that needs explaining, the simplest and most direct of your explanations/answers is often the right one.
- Hanlon's Razor- sometimes bad things happen, but that doesn't necessarily imply evil intentions.
- Scenario analysis- an approach to predicting future events by taking all possible outcomes into consideration.
- Socratic Questioning
 1. The first set of questions in Socratic questions pertains to clarifying the presented point of view.
 2. Probe that assumption and challenge the person's beliefs.
 3. This next batch of questions is aimed at extracting that reasoning or evidence.
 4. It is time to ask questions and explore alternatives.
 5. The process of exploring the consequences and implications of the assumptions.
 6. Time to question the questions that you asked so the person could see how this thought process worked overall.
- Avoiding Uncritical Thinking
 1. Never Jump to Conclusions

2. Keep Your Emotions Out of It
 3. Don't Linger in Your Comfort Zone
 4. Avoid Over-Analysis
 5. Embrace Your Individuality
 6. Control Reflexive and Wishful Thoughts
- 6 Steps to Solving ANY Problem
 1. Identifying the Problem
 2. Identifying Needs and Interests
 3. Analysis
 4. Exploring the Alternatives
 5. Implementation
 6. Assessment
 - Anchoring- our minds are affected by the first impression, and how we anchor to those and make poor decisions based on that fact.
 - Sunk Cost Trap- when you keep going through with a bad investment or idea because you have already invested time and money, so you keep pushing forward, hoping that the tide will turn.
 - Confirmation Bias- our tendency to try and align the outcomes of research to our own beliefs.
 - False Dilemma- when a person gives you an "either/or" situation when there is, in fact, other options that they are purposely or accidentally ignoring.
 - Post Hoc- when you reason that just because one thing happened before another, then the first event is what caused the second.
 - Action Bias- The tendency to choose action over inaction in the face of ambiguity even though taking action is counterproductive.
 - Status-Quo Bias- tend to favor the current situation and do nothing about their circumstances.
 - The Illusion of Control- The tendency to overestimate one's own control over external events.
 - Self-Serving Bias- the tendency to evaluate ambiguous information in a way that benefits a person's interests.
 - Cognitive Dissonance- The discomfort you experience on the inside that is caused when there is a conflict between your actions and behaviors, or beliefs and new information.
 - Thinking Fast and Slow:
 - System 1: rapid-fire and automatic, this thinking system allows us to make quick decisions that require little mental resources.
 - System 2: slow but accurate, this thinking system allows us to make more complex decisions at the cost of more mental resources.

Quotes from the author

- "The empathy you gain from analyzing and thinking about other people's points of view means you will be able to show those ideas the respect and recognition they deserve. It also means that you will be better equipped when it comes to

decision-making because you understand that each problem needs to be considered from all angles.”

- “Believe it or not, it is not just your brain that you will need to exercise to develop your problem-solving skills. A lot of people don’t seem to understand the importance of physical exercise, not just for their overall health, but also for their mental health.”
- “We tend to put too much stock in our intuition and gut feelings, which are often stemming from our very own biases. You need to start considering the possibility that you might be wrong, and you might be biased on occasions.”
- “Surround yourself with people that wouldn’t be afraid to call you out on your errors in judgment and biases.”

Quotes from others

- “Forward-thinkers look for solutions, but the backward-thinkers look for justifications.”
- Dr. Paul Schempp, an expert on high-performance leadership

Gateways to further learning

- [How to make good decisions- TEDx](#)

Referenced books with the potential to impact leading and learning in education

Author(s) Last Name	Title
Festinger	<u>A Theory of Cognitive Dissonance</u>
deBono	<u>Six Thinking Hats</u>

The applicability of this book to education is



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