

Critical Thinking

Life presents us with a relentless parade of issues so the ability to think critically is crucial!



Do People Think in Different Ways?

- We don't all think alike.
- Some people develop the capacity for more advanced thought that enables them to think critically.
- Research shows that experts can solve problems that novices cannot handle because they have more experience in area of expertise.



Critical Thinking Defined

- A logical and rational process of
 - avoiding one's preconceptions
 - by gathering evidence,
 - contemplating and evaluating alternatives,
 - and coming to a conclusion.



Guidelines

1. Critical thinkers are flexible.
 - They can tolerate ambiguity and uncertainty.
 - Avoid neat compartmentalizations of the world, refraining from black-and-white analyses of complex questions.



Guidelines

2. Critical thinkers identify inherent biases and assumptions.
 - Learned people's beliefs and experiences play a role in their biases and assumptions.
 - Most, if not all, statements have biases and assumptions behind them.
 - Biases and assumptions do not necessarily make statements wrong.



Guidelines

3. Critical thinkers maintain an air of skepticism.
 - As we come more experienced, we want more evidence, are more demanding.
 - Prove it!
 - Many times we question information or ideas only when they do not fit with our preconceived notions.
 - To be critical thinkers, we need to maintain a skeptical attitude even about ideas with which we agree.
 - We need to train ourselves to question statements and claims.



Guidelines

4. Critical thinkers separate facts from opinions.
 - When we draw conclusions about empirical matters, we need to rely on scientific evidence.
 - Scientists strive to be objective.
 - In relying on objective evidence, scientists use the scientific method of data gathering such as laboratory and field research.



Guidelines

5. Critical thinkers don't oversimplify.
 - Although simple explanations are often appealing, they are often too simplistic to be correct.
 - The world is a complicated place in which complex causation is the rule rather than the exception.
 - Because of this complexity, we must look beyond easy and obvious alternatives.
 - Avoiding oversimplification requires us to think divergently.



Guidelines

6. Critical thinkers use logical inferences process.
 - Draw inferences when we make hypotheses indirectly based on information given to us.



Guidelines

7. Critical thinkers examine available evidence before drawing conclusions.
 - Effective critical thinkers appreciate the need to consult diverse sources of information.
 - If we examine only one source of information, we may fall prey to a particular set of biased assumptions.
 - Once we have examined several sources, we can then think in a convergent manner.

