Introduction for Teachers and Students

Humans live in a world of thoughts. We accept some thoughts as true. We reject others as false. But the thoughts we perceive as true are sometimes false, unsound, or misleading. And the thoughts we perceive as false and trivial are sometimes true and significant. The mind doesn’t naturally grasp the truth. We don’t naturally see things as they are. We don’t automatically sense what is reasonable and what unreasonable. Our thought is often biased by our agendas, interests, and values. We typically see things as we want to. We twist reality to fit our preconceived ideas. Distorting reality is common in human life. It is a phenomenon to which we all, at times, unfortunately fall prey.

Each of us views the world through multiple lenses, often shifting them to fit our changing feelings. In addition, much of our perspective is unconscious and uncritical and has been influenced by many forces – including social, political, economic, biological, and psychological influences. Selfishness and narrow-mindedness are deeply influential in the lives of most people.

We need a systematic way to further sound thinking and limit unsound thinking. We need to take command of our minds in order to determine in a reasonable way what thinking to accept and what to reject. Critical thinking is that process, that orientation, and in the finest cases, that way of living.

This guide focuses on the essence of critical thinking concepts. For teachers it provides a shared concept of critical thinking. For students it introduces critical thinking and provides strategies for developing one’s own critical thinking. Teachers can use it to design instruction, assignments, and tests in any subject. Students can use it to improve their learning in any content area.

The skills implicit in this guide apply to all subjects. For example, critical thinkers are clear as to the purpose at hand and the question at issue. They question information, conclusions, and points of view. They strive to be clear, accurate, precise, and relevant. They seek to think beneath the surface, to be logical, and fair. They apply these skills to their reading and writing as well as to their speaking and listening. They apply them in all subjects and throughout life.

If you are a student using this guide, get in the habit of carrying it with you to every class. Consult it frequently in analyzing and synthesizing what you are learning. Aim to deeply learn the ideas you find in it – until using them becomes second nature.
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There are Three Main Kinds of Thinkers

The Naïve Thinker
The person who doesn’t care about, or isn’t aware of, his or her thinking

The Selfish Critical Thinker
The person who is good at thinking, but unfair to others

The Fairminded Critical Thinker
The person who is not only good at thinking, but also fair to others

Each of us may sometimes be a naïve thinker, sometimes a selfish critical thinker, and sometimes a fairminded critical thinker.

We can create a better world when we work together to be fair to everyone. We will never be perfect, but we can always improve our thinking. This guide will help you develop as a fairminded thinker.
Intellectual Humility

Recognize that you don’t know everything. There is a lot that you don’t know (and will never know). Don’t say something is true when you don’t know for sure that it is. Lots of things you think are true may not in fact be true. Lots of things people say are true are actually not true and lots of things you read or see on TV are not true. Always ask, “How do I know that? How do you know that?”

Intellectual Courage

Be ready to speak up for what you think is right, even if it is not popular with your friends or the people around you. Of course, sometimes speaking up can be dangerous. Use your best thinking to figure out when it makes sense to speak up and when you should just keep your thoughts to yourself. When you do speak up, try always to show respect for others. But don’t ever be afraid to disagree in the privacy of your own mind. And don’t be afraid to question your beliefs, to figure out what makes best sense. Develop the courage to look inside your own mind and figure out what is really going on there. Even if you have held a belief for a long time, you still need to be willing to question it, to use the tools of critical thinking to recheck it.

Confidence in Reason

The best chance we have to create a fair and just world is if we use our best thinking, all of us, together, living on the planet. When people disagree, they need to overcome disagreements by looking at the facts, at the evidence. We need to work together to come to the most defensible conclusions. Use intellectual standards in working through problems. For example, make sure you use information that is accurate and relevant to the problem you are trying to solve. Look for the complexities in deep issues. Avoid superficial answers to complicated problems as they almost never work. Think about problems from different points of view. Trust evidence, facts and reasoning. Distrust blind faith, jealousy and fear.

Fairmindedness

Try to figure out what is most fair in every situation. Think about everyone involved, not just about you. Don’t put your desires and needs above those of others. You should even be willing to give things up to help other people when their needs are much greater than yours. Try to imagine what it would be like to think and feel as other people do, to be in their shoes. Don’t act until you have done this. Think before you act. Don’t act before you think.
We Take Our Thinking Apart to Find Problems in Our Thinking – and Solve Them

Here are the parts:

- **Points of View** we need to consider
- **Purpose** of our thinking
- **Implications and Consequences** of our thinking
- **Questions** we are trying to answer
- **Assumptions** we are taking for granted
- **Information** needed to answer the question
- **Concepts** or key ideas we are using in our thinking
- **Inferences** or conclusions we are coming to
Analyzing Chapters in a Textbook

Every textbook, and every chapter in every textbook, has a logic that can be figured out. One important way to do this is by looking at the parts of the author’s thinking.

Here is a template to follow:

1) **The main purpose of this chapter is…**
   (Here you are trying to state, as accurately as possible, the author’s purpose in writing the chapter. What was the author trying to accomplish?)

2) **The key question at the heart of the chapter is …**
   (Your goal is to figure out the main question that was in the mind of the author when he/she wrote the chapter. What was the key question she or he addresses?)

3) **The most important information in this chapter is …**
   (You want to identify the key information the author is using in the chapter to support his/her main arguments. Look for facts, experiences, and/or data the author is using to support his/her conclusions.)

4) **The main inferences in this chapter are…**
   (Figure out the most important conclusions the author comes to and presents in the chapter.)