

THE ASPIRING THINKER'S

Guide to Critical Thinking

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The Foundation for Critical Thinking

The background of the cover features a warm, golden-yellow color palette. It depicts silhouettes of several people walking across a city street. In the foreground, there are silhouettes of trees and a street sign. The overall scene is a stylized, high-contrast representation of an urban environment.

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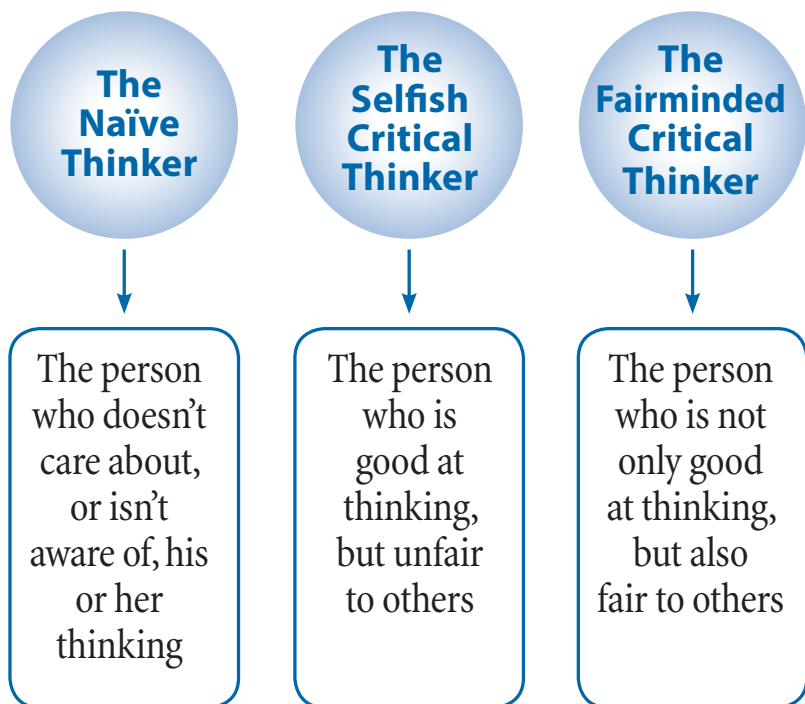
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There are Three Main Kinds of Thinkers



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.

The Fairminded Critical Thinker

Fairminded critical thinkers work to improve their thinking whenever they can. They want things for themselves, but they aren't selfish. They want to help other people. They want to help make the world better for everyone. They are willing to give things up to help others (when it makes sense to). They don't always have the right answers, but they work to improve their thinking (and actions) over time.

Here is the voice of the fairminded critical thinker...

"I think a lot. It helps me learn. It helps me figure things out. I want to understand the thinking of other people. In fact, I even want to understand myself and why I do things. Sometimes I do things I don't understand. It's not easy trying to understand everyone and everything. Lots of people say one thing and do another. You can't always believe what people say. You can't believe a lot of what you see on TV and the internet. People often say things they don't mean because they want things and are trying to please you.

"I would like to make the world a better place. I want to make it better for everyone, not just for me and my friends. To understand other people you have to look at things as they do. You have to understand their situation and what you would feel like if you were them. You have to put yourself in their shoes. I think about people who don't have what I have,



like people who are starving or homeless. I want to help create a world where everyone has enough to eat and somewhere to live.

"It isn't easy to be fair. It's a lot easier to be selfish and just think about yourself. But the world isn't a nice place to be if people are selfish."

The Selfish Critical Thinker

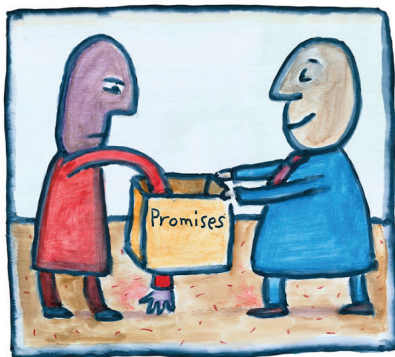
Selfish critical thinkers are people who use their thinking to get what they want, without considering how their actions might affect other people. They are good at thinking, and they know it. But they are also very selfish. They may be greedy and unkind as well.



Here is the voice of the selfish critical thinker...

“I think a lot! It helps me get what I want. I believe whatever I want to believe as long as it gets me what I want. I question anyone who asks me to do what I don't want to do. I figure out how to get other people to do what I want them to do. I even figure out how to avoid thinking if I want.

“Sometimes I say ‘I can't!’ when I know I could but don't want to. You can get what you want from people if you know how to manipulate them. Just the other night, I talked my parents into buying me a really expensive new computer gadget I knew they couldn't really afford. But hey, they work don't they? They can always make more money. I'm their kid so they should give me what I want.



“It helps to tell people what they want to hear. Of course, sometimes what they want to hear isn't true, but that doesn't matter because you only get into trouble when you tell people what they don't want to hear. You can always trick people if you know how. Guess what, you can even trick yourself if you know how.”

The Naïve Thinker

Naïve thinkers don't see why it is important to work on their thinking. They don't want to be bothered with developing their minds.

Here is the voice of the naïve thinker...

"I don't need to think! I understand everything without thinking. I just do whatever occurs to me to do. I believe most of what I hear. I believe most of what I see on TV and what I read on the internet. I don't see why I should question the messages that come at me on TV shows and the internet. I don't think they affect me that much anyway.

"And I don't need to waste a lot of time trying to figure things out. If I need to find the answer to a problem, I just ask someone else. Other people can figure things out better than me, so why should I try to figure things out for myself? It's a lot easier to say 'I can't!' than to do a lot of work.

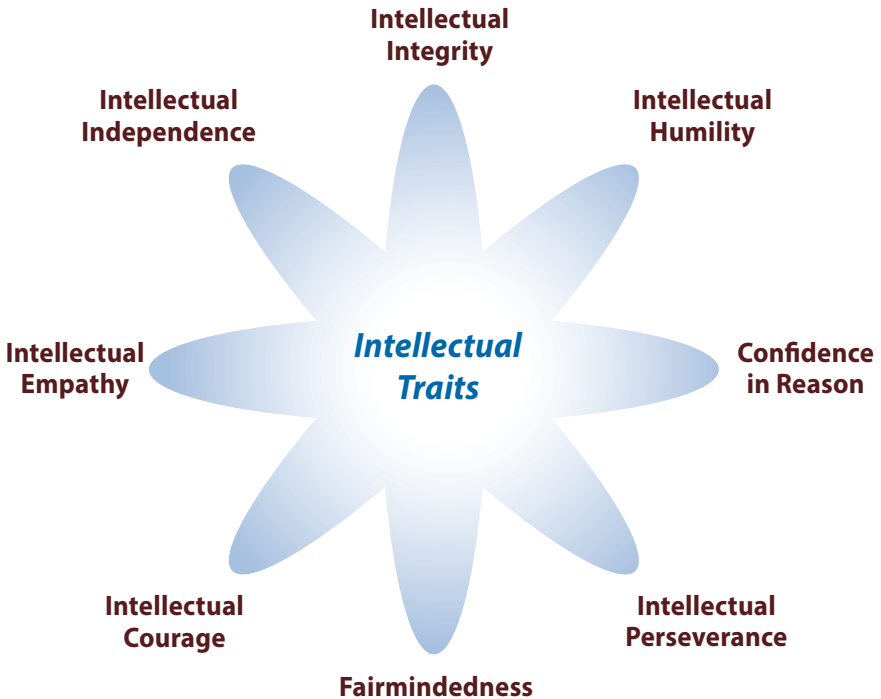


A lot of times trying to figure things out takes too much time. And sometimes it's just too hard for me, so why bother?

"I mostly go along with whatever people are doing. It's just easier that way. I do what I'm told, keep my mouth shut, and go along with whatever my friends decide. I don't like to make waves. Thinking gets you into trouble."

Developing Intellectual Character

Fairminded critical thinkers want to develop intellectual habits or traits. These traits define how they live their lives – how they learn, how they communicate with other people, how they see the world. Here are some of the important intellectual traits or virtues. See if you can figure out what each one might mean before reading the descriptions on the next page. When thinking about important ideas, it's always helpful to start with a dictionary.



How to Become a Fairminded Critical Thinker

Intellectual Integrity

Act towards others the way you want people to act towards you. Respect others in the same way you want to be respected. Don't expect others to act better than you are willing to act yourself. Consider the feelings of others in the same way you want your own feelings to be considered. Because you don't want others to be rude to you, avoid being rude to others. Because you don't want to be harmed by others, be careful not to harm others.

Intellectual Independence

Do your own thinking. Figure things out for yourself. It is good to listen to others to find out what they think, but you must do your own thinking to decide who and what to believe. Of course don't just believe what you want to believe. Use intellectual standards to decide; standards like accuracy, relevance, significance and fairness.

Intellectual Perseverance

Don't be a quitter. When you begin to think you can't learn something, remind yourself that *you can*. If reading is hard for you, stick to it (because it is important to learn to read well). When writing is hard, keep trying so you can learn to write better. Don't be afraid to work hard when you feel like giving up. Remember that no matter how good you are at thinking, you can always improve. And no matter how much you struggle with learning, keep trying. *Never give up!* Be the captain of your own ship. Chart your own course in life.

Intellectual Empathy

Always try to understand how other people think and feel. Whenever you disagree with someone, try to see things from that person's point of view. When you do try to see things from other people's viewpoints, you will often find that there are some things you are right about and some things other people are right about. Being able and willing to imagine how others think and feel is very important in life. If everyone did this a lot, the world would be much better for everyone. There would be a lot less pain and suffering.

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.

Be Relevant: Make Sure You Stay on Track

Something is relevant when it relates directly to:

- the problem you are trying to solve.
- the question you are trying to answer.
- whatever you are talking about or writing about.



All instruments in a cockpit are *relevant* to flying the airplane, but they are not relevant to riding a bicycle.

Questions you can ask when you are not sure whether something is relevant:

- How does what you say relate to the problem?
- How does this information relate to the question we are asking?
- What will help us solve the problem?
- How does what you say relate to what we are talking about?
- How does this relate to our purpose?

Think About Fairness

Fair people want to be fair thinkers. But they realize this isn't easy.

Here are some ways that people are unfair:

- | | |
|------------------------|------------------|
| 1) Being cruel | 5) Being unkind |
| 2) Being disrespectful | 6) Being selfish |
| 3) Being inconsiderate | 7) Being mean |
| 4) Being rude | 8) Being hurtful |

Fair thinkers know it isn't always easy to be fair to others. They question their behavior. They ask "How fair, how just, am I being?" Good thinkers see that lots of problems happen when we are unfair to others. And they realize that no one is perfect, that we are all sometimes unfair. They think about their thinking. They even write about their thinking and their behavior. Sometimes they keep a journal. In the journal, they write about problems in their behavior and then try to figure out why they did what they did. For example, they try to figure out what they were thinking that led them to unfair behavior.

On the next page is a journal sheet. You can make copies of it and put your copies in a notebook. Then you can write about your thinking and behavior using these sheets. This will help you see your behavior in the "mirror" of your writing.

Write one journal entry each week using these sheets and see if this helps you become more fair.

Check Your Inferences

Inferences are conclusions you come to. It's what the mind does in figuring something out. You make inferences every day. (Jane is my friend, so I infer I can trust her.)

Realize that every time you make an inference, you might make a different, more logical one.



An inference is a step of the mind which happens when the mind says "X is true, therefore 'Y' is true."

For example, "It is raining outside," therefore "I should take an umbrella today" (see pp. 30-32).

Questions you can ask to check your inferences:

- What conclusions am I coming to?
- Are there other conclusions I should consider?
- Is my inference logical?
- Is this other person's inference logical?

The main conclusions (or *inferences*) the character comes to are...

(Look for the most important conclusions the character comes to, the conclusions that lead to important action. Sometimes these conclusions lead the character to make mistakes or cause problems for other people.)

The main consequences (*implications*) of the character's behavior are...

(Characters make decisions and then act on those decisions. Look for the important things that happen after they act. These are the significant consequences.)



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.)

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About the Authors



Dr. Linda Elder is an educational psychologist who has taught both psychology and critical thinking at the college level. She is the President of the Foundation for Critical Thinking and the Executive Director of the Center for Critical Thinking. Dr. Elder has a special interest in the relation of thought to emotion, and in the cognitive and affective. She has developed an original theory of the stages of critical thinking development. Dr. Elder has coauthored four books on critical thinking, as well as 24 Thinker's Guides. She has presented workshops to more than 50,000 educators.



Dr. Richard Paul was a leading proponent of critical thinking until his death in August of 2015, and in his work and legacy, Paul remains an international authority on critical thinking. He founded the Center for Critical Thinking at Sonoma State University in 1980, followed by the Foundation for Critical Thinking. In his lifetime, he developed concepts, principles, and theory essential to a robust and fairminded conception of critical thinking; he worked tenaciously to advance ethical, or strong-sense, critical thinking throughout education and society. In his lifetime, Paul authored more than 200 articles and seven books on critical thinking. He presented workshops to hundreds of thousands of educators over his 35-year history as a primary leader in the critical thinking movement.