Critical Thinking
Perceptions & Reality

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Critical Thinking

The ability to
• Acquire information
• Analyze, and then evaluate it
• Reach a conclusion by logic and reasoning skills

Reasoned and Reflective Thought
• aimed at an assessment such as the authenticity or accuracy of a claim.
According to Jon Warner, critical thinking differs from both analytical thinking and lateral thinking in the following ways:

- **Analytical thinking** mainly aims to review the data/information we are presented with (for relevance, patterns, trends etc.)
- **Lateral thinking** aims to put data/information into a new or different context (in order to generate alternative answers or solutions)
- **Critical thinking** aims to make an overall or holistic judgment about the data/information which is free from false premises or bias as much as possible.
Why Critical Thinking Skills Are Important

• While there are many more professional skills that you develop and draw upon in your professional life, critical thinking skills are foundational to your ability to engage others, problem-solve, guide, motivate, and navigate in organisational settings. And, like everything else in life, mastery of critical thinking skills requires hard work and ample practice.
Specifically, an individual who exhibits strong critical thinking skills would do activities such as the following well.

• Problem solve and identify patterns
• Perform effective data analysis
• Communicate opinions, ideas, and concerns
• Conceptualise Data
• Regard information inclusively and objectively
• Reason logically
A QUESTION
Are Perceptions Reality?

YES - Perception is the process by which people translate sensory impressions into a coherent and unified view of the world around them.

And NO - Perceptions create our own reality which might not be the same as someone else’s reality.

The difference stems from our individual interpretation of the information available to us.
Remember That Dress… What colours do you see?
What do you see?
What do you see?
“You can look at it for hours and be sure it’s a rabbit. One day you look and it’s a duck.”

- Ted Mosby (How I Met Your Mother)
Our personal view of reality

Perception

Facts (Sensory Specific)

Culture Memories Upbringing Language

Beliefs Values Identity State

Unique combinations that explains why we are all different and why we see the world and act in it so differently
How perception works: Let me tell you a story....

“Sam was walking to school...

Sam was worried about the Maths lesson...

Sam was remembering how bad the students’ behaviour was last week as they left the class, and how difficult it was to control them...

...Sam didn’t think it was a caretaker’s job to get involved in managing students’ behaviour, so she was angry with the Head for not doing anything about it!”
How perception works:
Let me tell you a story....

We make reality up
as we go along!
How our filters work to create our own picture of reality

We automatically and unconsciously *delete, distort* and *generalise* information to make sense of the world.
Your brain builds a picture of the world the best way it can...

Fills in the blanks...
Deletes or ignores information that doesn’t fit
Fits with memories...
Judges based on beliefs & values...
Attaches meaning...
...and anticipates future
Critical Thinking?

• So if my brain creates reality as it goes along – how can be sure I am using critical thinking?
The Ladder of Inference
The ladder of inference describes the thinking process that we go through usually without realising it, to get from a fact to a decision or action.

The thinking stages can be seen as rungs on a ladder...
Adapted from Peter Senge’s book *The Fifth Discipline Fieldbook*. Copyright 1994
Ladder of Inference

- Starting at the bottom of the ladder, we have reality and facts. From there, we:
- Experience these selectively based on our beliefs and prior experience.
- Interpret what they mean.
- Apply our existing assumptions, sometimes without considering them.
- Draw conclusions based on the interpreted facts and our assumptions.
- Develop beliefs based on these conclusions.
- Take actions that seem "right" because they are based on what we believe.
Stop! It's time to challenge your reasoning.

Identify where on the ladder you are:

- Selecting data or reality?
- Interpreting what it means?
- Making or testing assumptions?
- Forming or testing conclusions?
- Deciding what to do and why?

From your current "rung," analyse your reasoning by working back down the ladder. This will help you trace the facts and reality that you are actually working with.
Ladder of Inference

• At each stage, ask WHAT are you thinking and WHY.
• As you analyse each step, you may need to adjust your reasoning. For example you may need to change some assumption or extend the field of data you have selected.
Using the model

• The following questions help you work backwards (coming down the ladder, starting at the top):

  • Why have you chosen this course of action? Are there other actions you should have considered?
  • What belief lead to that action? Was it well-founded?
  • Why did you draw that conclusion? Is the conclusion sound?
  • What are you assuming, and why? Are your assumptions valid?
  • What data have you chosen to use and why? Have you selected data rigorously?
  • What are the real facts that you should be using? Are there other facts you should consider?
Uses

Evaluating information is part of every day life

• Reviewing Data
• Evaluating Options
• Decision making
• “Discussing” with family members
What is critical thinking?

Critical thinking (noun)
The objective analysis and evaluation of an issue in order to form a judgement.

Challenging your perceptions to come to a conclusion
Thank you for listening

“Perception is like painting a scenery - no matter how beautifully you paint, it will still be a painting of the scenery, not the scenery itself.”

— Abhijit Naskar,