An Elementary Guide to Critical Thinking

What Is Critical Thinking?

'Critical Thinking' is the objective, evidence-based analysis of an idea or theory. It requires you to question assumptions and seek opinions that challenge the prevailing wisdom.

Why Does It Matter?

Collecting, analysing and evaluating information is becoming increasingly important in the workplace. People who score highly in critical thinking assessments are also rated by their managers as having:

- good problem-solving skills
- creativity
- strong decision-making skills
- good overall performance [1]

The Key Characteristics of Critical Thinkers

Scepticism

Critical thinkers accept nothing at face value. When presented with an argument, they ask:

- Who is saying this?
- Are they credible?
- What is their motive?
- Are they biased?
- What evidence do they have?

Self-Awareness

As well as recognising bias in others, critical thinkers are conscious of their own beliefs and assumptions. They guard against:

- **Confirmation bias**: prioritising data that supports their beliefs.
- **Stereotyping**: unconscious preconceptions that affect reasoning.
- **Self-serving bias**: drawing conclusions that are beneficial to them.
- **Herd instinct**: favouring prevailing majority beliefs.
- **Pattern-seeking**: mistaking correlation (two things happening together) for causation (one thing causing the other).

Curiosity

Critical thinkers base decisions on a dispassionate analysis of data from a wide range of sources. They seek truth by:

- being open to new information
- seeking opposing views
- looking for evidence to disprove their theories
- reassessing their beliefs in light of new evidence

Top Tips for Critical Thinking

Map Out Ideas

Whether it comes to listing pros and cons, creating a flow chart or entering data into a spreadsheet, visualising an argument can lead to a clearer understanding of the issue at hand. [2]

Consider Context

It is important to know how information and data was collected to weigh it appropriately. For example, with a survey, consider:

- **Methodology**: how and when was the data collected?
- **Sample size**: how many people were included?
- **Demographics**: was the age/sex/race etc. of the sample representative of the whole?
- **Impartiality**: what questions were asked? Were they neutral or leading?

Favour Simplicity

The principle of Occam's Razor dictates that, when faced with two competing hypotheses, preference should be given to the simpler of the two, because it requires fewer assumptions.

"It is a capital mistake to theorize before one has data. Insensibly one begins to twist facts to suit theories, instead of theories to suit facts." [3]

References

[1] Pearson TalentLens, 'Critical Thinking Means Business'. Available at: http://thinkwatson.com/downloads/Pearson_TalentLens_Critical_Thinking_Means_Business.pdf (accessed 7 December 2015).

[2] Carleton University, '10 Tips for Critical Thinking'. Available at: http://carleton.ca/sasc/wp-content/uploads/196-09-10-Tips-Thinking-Critically.pdf (accessed 7 December 2015).

[3] Sir Arthur Conan Doyle, *Adventures of Sherlock Holmes* (Harper & Brothers, New York, 1892) p7.