Critical Thinking in 5 Steps

1

Define the problem to be solved
- Clearly define the problem
- Capture it in writing

2

Gather data
- Research and learn all you can about the issue
  - Pull data, observe what is happening, engage with people involved
  - Gather both quantitative and qualitative data
- Choose multiple sources with diverse points of view

3

Evaluate data and sources
- Are the sources reliable? (Consider motive, timing, background)
  - How do you know?
- Identify assumptions or bias
  - Source – what is their bias? How do you know?
  - Own – What is your own perspective or bias?
  - How will this impact your decision making?

4

Establish significance
Not all facts, data, information are equal
- What is the most important data?
  - Does it address the root cause or a symptom?
- What is the data based on?
  - Opinion or facts?
  - How large of a sample size?
- Are all opinions/arguments and data, relevant to what you are trying to solve?

5

Reach a conclusion
- What are possible conclusions?
  - Are they sufficiently supported?
- Weigh strengths and limitations of each conclusion
- Does it make sense?
- Can you find an example or situation where it does not work?