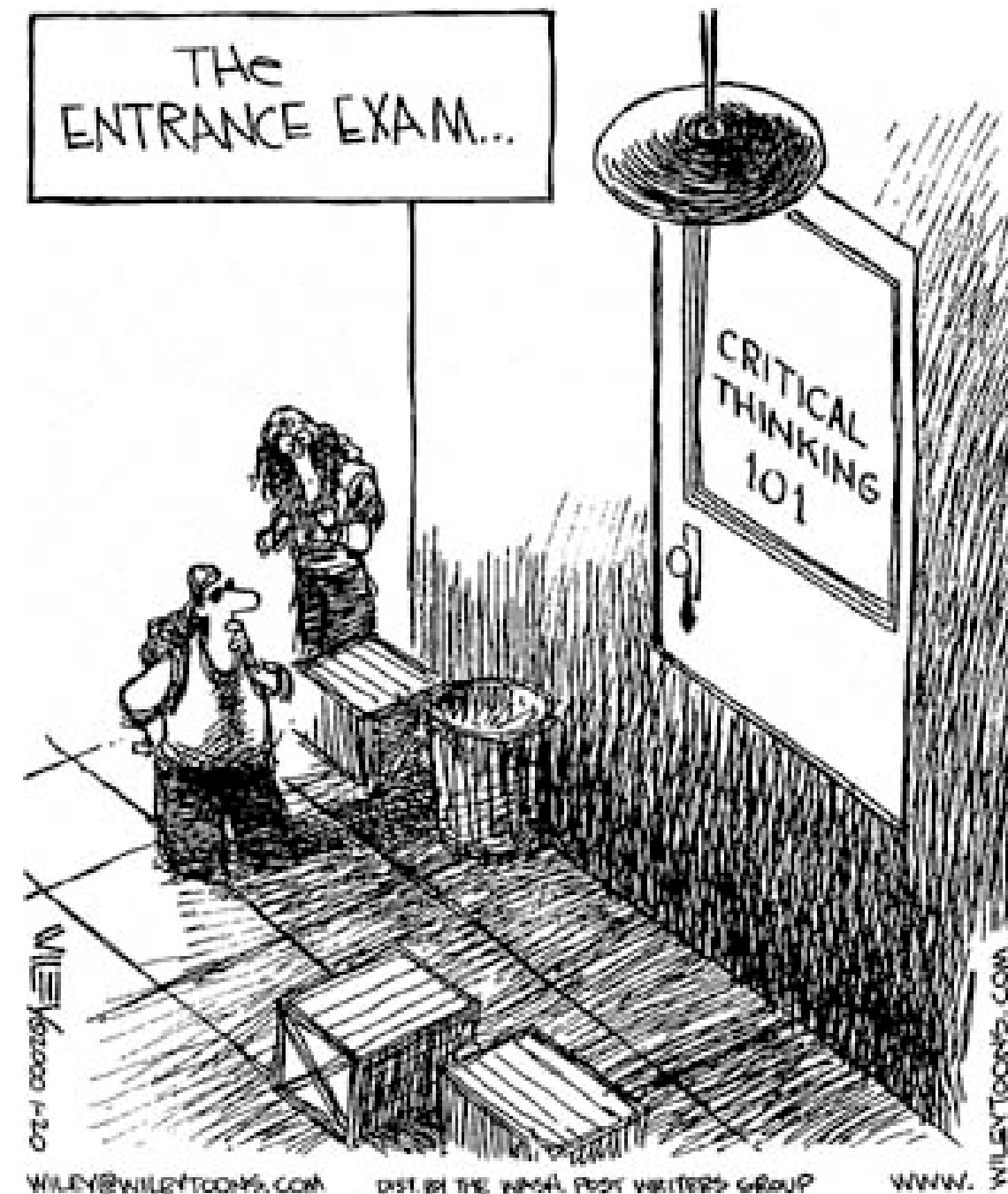
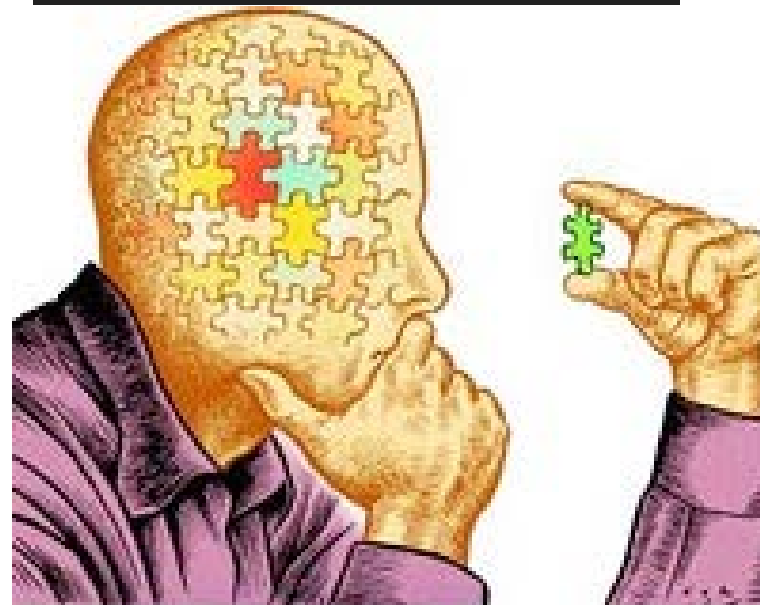
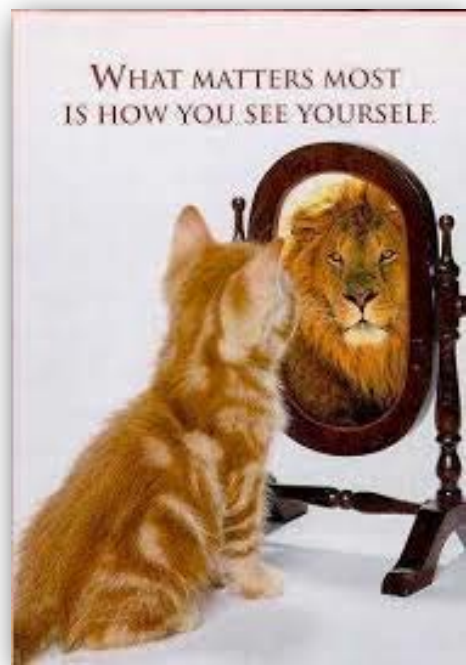


# Critical Reflection



# What is Critical Reflection?



# What is Critical *Reflection*?

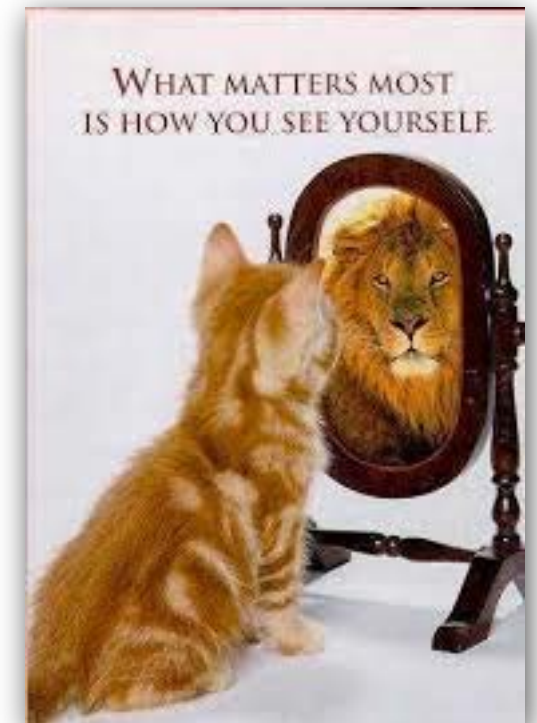


Reflection is consciously “looking back” on experiences (in our context at university).

WHY?

What is the aim or goal of reflection?

to learn from the experiences ... means of constructing knowledge about the world and ourselves





What experiences should you reflect on?

# CRITICAL INCIDENTS!

A specific experience that is *significant*

It had a significant *consequence*

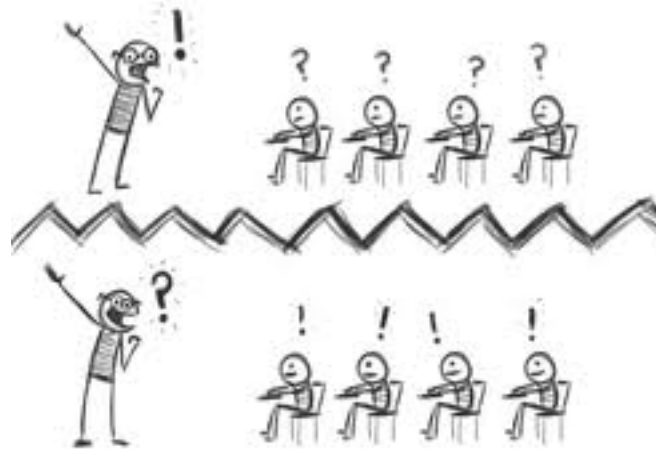
You can *learn* a lesson from what happened



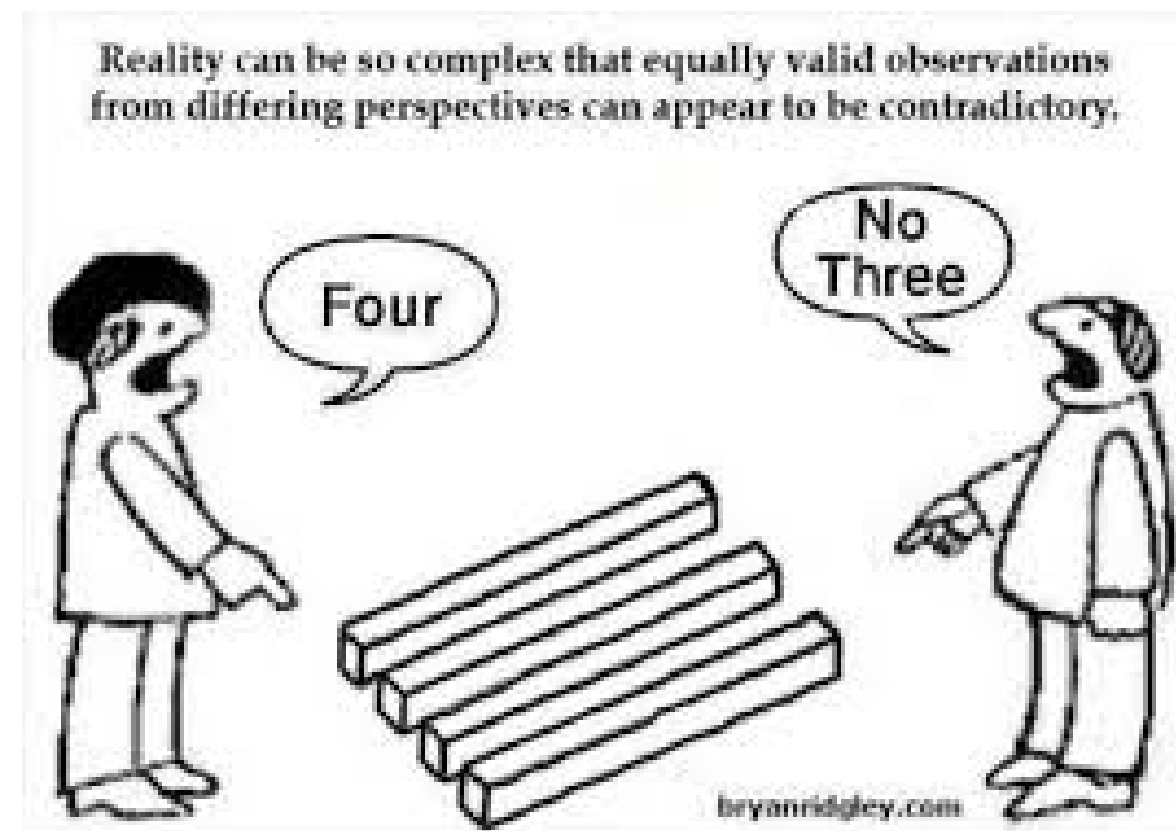




# What is *Critical* Reflection?



Critical thinking is a desire to seek, patience to doubt, fondness to meditate, slowness to assert, readiness to consider, carefulness to dispose and set in order; and hatred for every kind of imposture.  
~ Francis Bacon (1605)



<http://www.criticalthinking.org/>

Critical thinking is the process of analysing, reconsidering and questioning our experiences with respect to a set of issues (like project goals, personal growth, team process).  
It is the process we use to reflect on, uncover and judge the assumptions underlying our own and others ideas and actions.  
Describe. Evaluate. Question. Probe. Compare. Explain. Reason. Evidence. Claim. Conclude.

# What is *Critical* Reflection?

Critical Reflection is the process of analysing, reconsidering and questioning our experiences with respect to a set of issues (like project goals, personal growth, team process). It aims at adding depth and breadth to the meaning and understanding of our experiences.

<http://www.criticalthinking.org//>

# Example

- Who had trouble with communications?
- What happened?
- Is this critical reflection so far?
- Why did this happen?
- What were the root causes?
- What were the consequences?
- How could it have had a better outcome
- Is there any theory to explain others' ideas of why it happened and how it could be avoided?





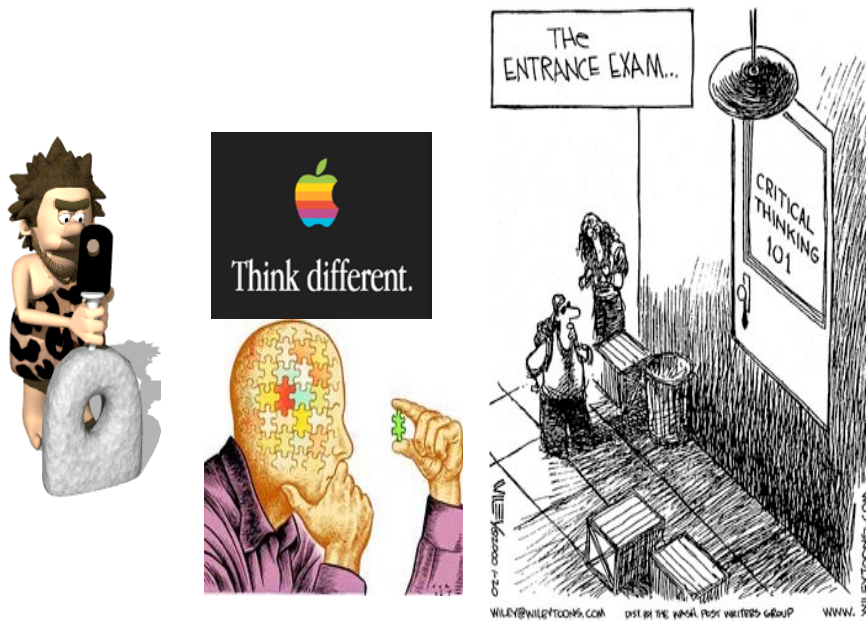
## Your turn to think...

- Discuss with your neighbour a *critical incident* from your project and why it is significant and what you could learn.  
(Make some notes)

# Why do we ask you to critically reflect on your project?

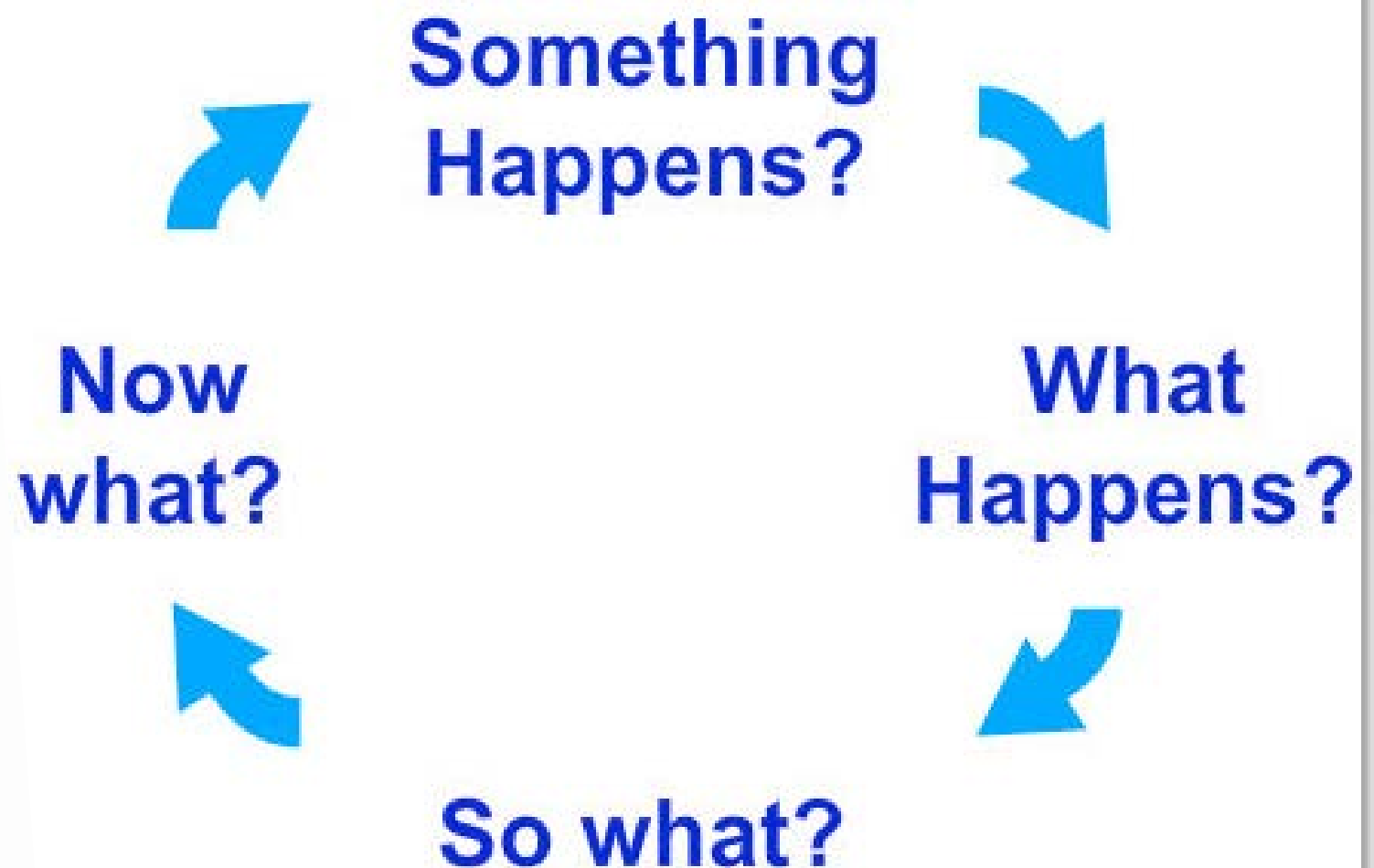
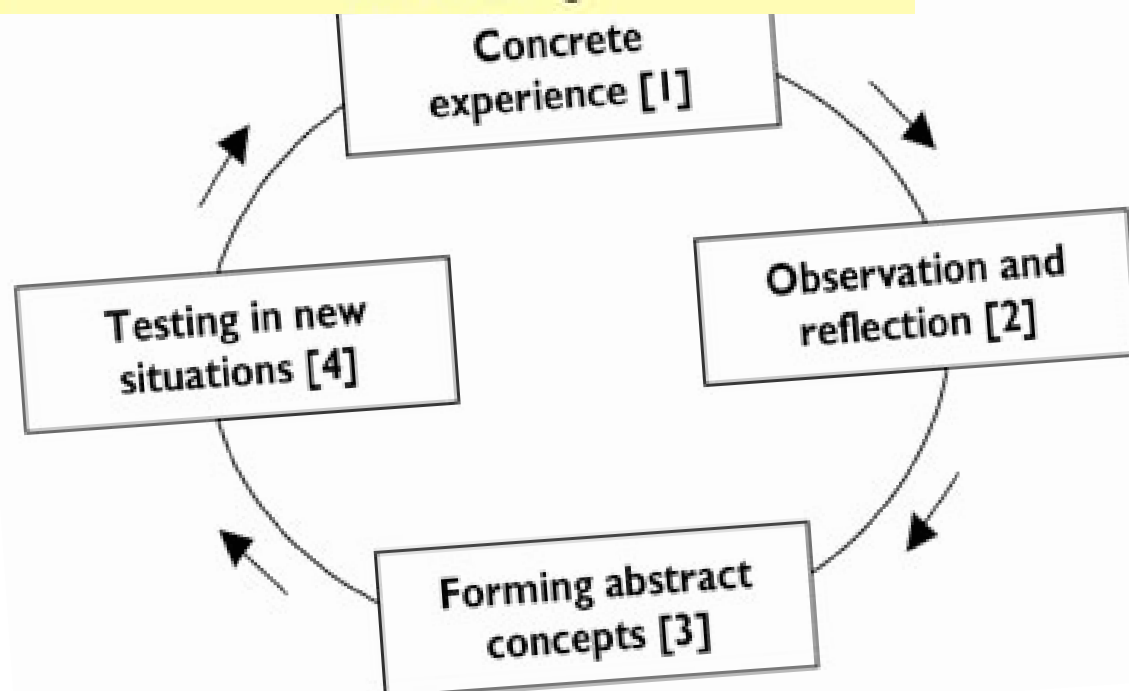
Reflection is “looking back” on experiences - to learn from them (in our context at university).

A means of constructing knowledge about the world and ourselves



Critical Reflection is the process of analysing, reconsidering and questioning our experiences with respect to a set of issues (like project goals, personal growth, team process). It implies adding depth and breadth to the meaning and understanding of our experiences.

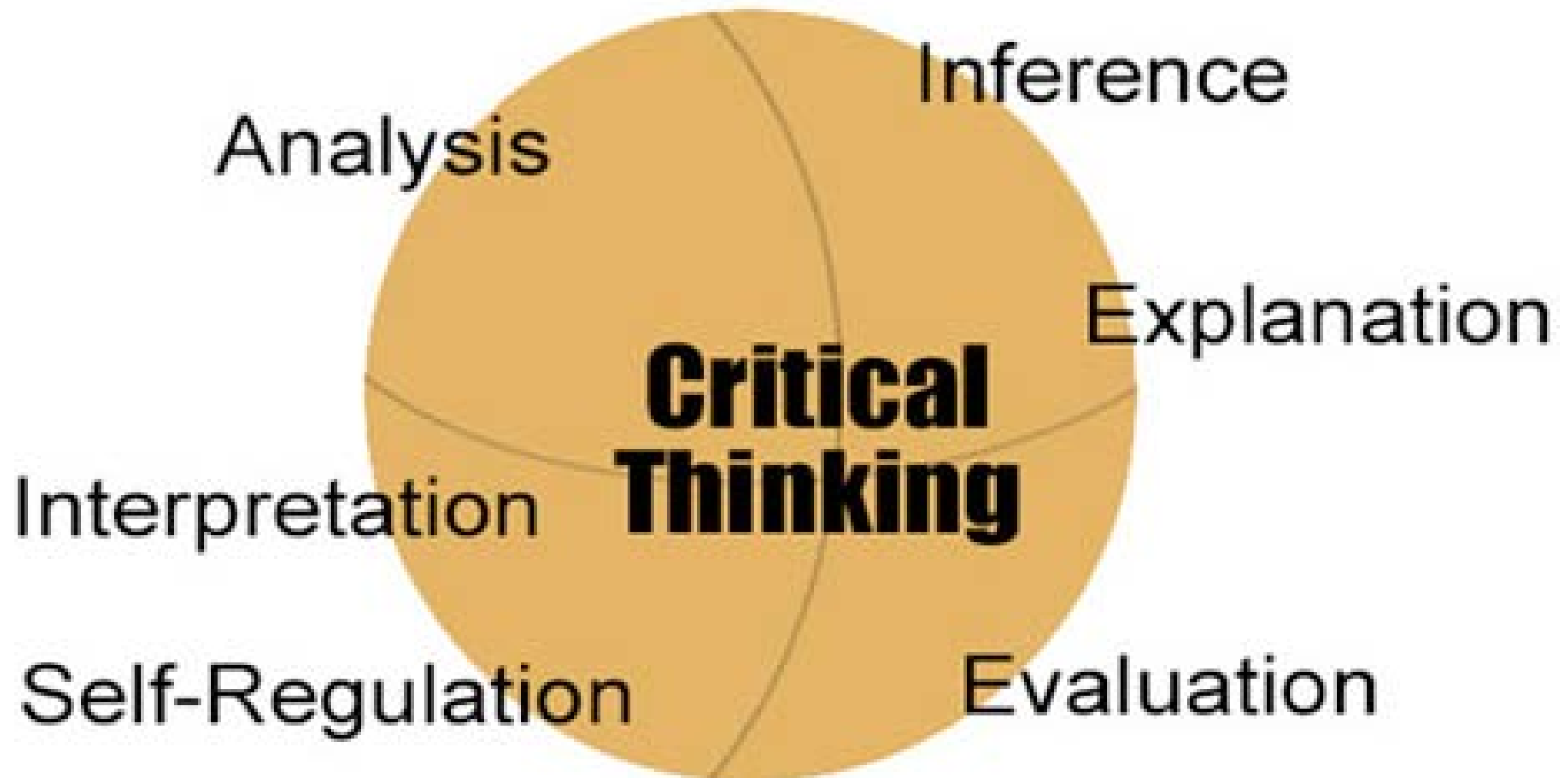
# Why do we ask you to critically reflect on your project?





Skills we hope you develop by getting  
better at critically reflecting

## **Core Critical Thinking Skills**



# Example of non-critical thinking

Everybody knows that smoking is bad, so parents shouldn't smoke when they have children. But those parents who do smoke don't care about their children.

- What is the evidence?
- What is the reasoning?
- Parents who smoke don't care about their children. Is it that simple?
- It is not that simple...
- nicotine patches are expensive...
- generalisation from 1 area of parent's behaviour
- oversimplification...

**Avoid**  
Assertions/claims with no evidence  
Overly subjective/emotional preferences  
Too general and vague (imprecise)

# Other examples of non-critical thinking

- Our team didn't work well together because NoName didn't do his work on time and when he did it wasn't very good.
- Our team worked really well together- we always agreed.
- YOU WRITE DOWN AN EXAMPLE OF NON-CRITICAL THINKING ABOUT YOUR PROJECT



# Example of critical thinking

Specific example described in detail. Then...

Analysis:

- What the causes were with reasoning/evidence (including research)
- What the consequences were with reasoning/evidence (including research)
- What could have been done differently
- What evidence is there that the outcome would be different (from what actually happened)

...evidence from  
...forming teams keep in touch  
...how what each other is doing (Buchan, 2016).  
In this study of 32 teams, Buchan measures.....

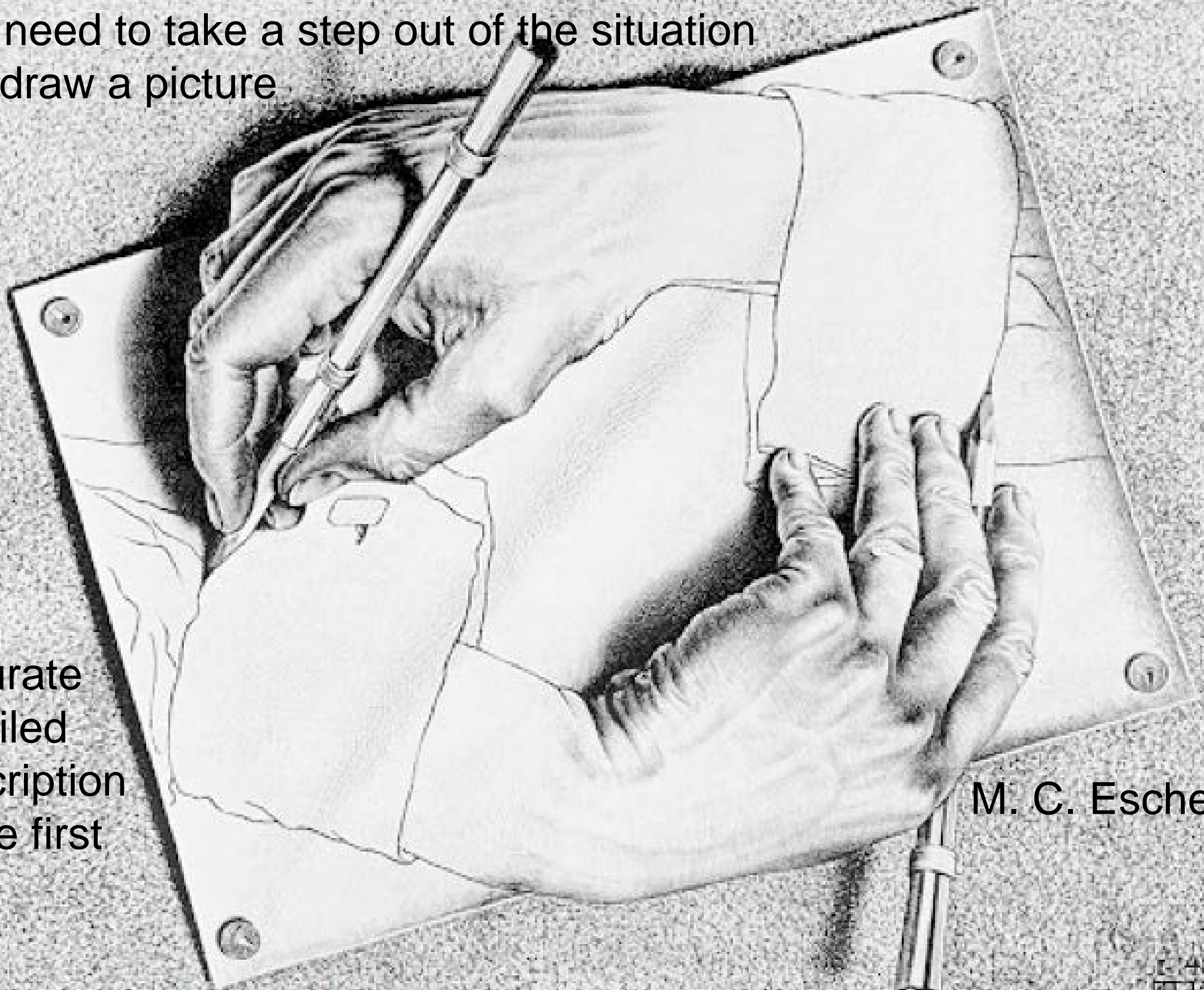
It ain't easy!



You need to take a step out of the situation  
and draw a picture

An  
accurate  
detailed  
description  
is the first  
step

M. C. Escher





# What do we expect in a Critical reflection essay?

- analyse your current knowledge, experience and your own assumptions to gain a different perspective on managing a business
- relate your experience to theory
- Communicate the strength of your argument
- some critical reflection is more probing

- **NOT just the story of everything you did**
- **Not everything you know**
- **refer to an event/idea/theory**

# Some Strategies for critical reflection

- Ask yourself why something happened, or why something did not happen.
- Ask yourself what was good: why?; what was bad: why?; what was neither good nor bad, yet interesting and relevant: why?
- Think of alternatives; what other things could have happened and how could you devise ways of making them happen?
- Look for other points of view (e.g., what was this like from the clients' perspective?).
- Look for hidden assumptions in others' attitudes, and in your own (e.g., what incidents in my own experience have led me to believe this?; what are the hidden rules in my own culture?).
- Parts and qualities: look at something as a collection of parts (components and relationships), but also as a set of qualities (e.g., values and judgements).
- Look at something from an opposite point of view to challenge it.
- Ask who might be advantaged and who might be disadvantaged by current (and new hypothetical) responses and actions.

# The Master Skill...asking questions

## Questions for clarification

- Why do you say that?
- How does this relate to our discussion?

## Questions that probe assumptions

- What could we assume instead?
- How can you verify or disapprove that assumption?

## Questions that probe reasons and evidence

- What would be an example?
- What is...analogous to?
- What do you think causes to happen...? Why?

## Questions about Viewpoints and Perspectives

- What would be an alternative?
- What is another way to look at it?
- Would you explain why it is necessary or beneficial, and who benefits?
- Why is the best?
- What are the strengths and weaknesses of...?
- How are...and...similar?

## Questions that probe implications and consequences

- What generalizations can you make?
- What are the consequences of that assumption?
- What are you implying?
- How does...affect...?
- How does...tie in with what we learned before?

## Questions about the question

- What was the point of this question?
- Why do you think I asked this question?
- What does...mean?
- How does...apply to everyday life?

# Identifying the areas to critically reflect on

- Who had trouble with the client?
- Who had trouble with the team?
- Who had trouble with the process?

even if it's

- What did you learn from these critical incidents?
- How can you explain what happened?
- What would you do differently and why would this result in a different outcome?

in the working

with the client?

# Areas

- Evaluation of Project Outcomes
- Evaluation of team
- Evaluation of personal Growth



# Critical Reflection

- Thinking back on the experience to learn
- (Schon “The Reflective Practitioner”)
- Most reflective reports we read are descriptive – what I (we) did or didn’t do.
- What is missing?

# Critically Reflecting

- What are you looking for in your memory or notes or log or learning blog to reflect on?
- Incidents or events where things changed (critical incidents)-not ok to ok
  - Example ?
  - Stopped extending iteration to fit unfinished work
  - Started weekly meeting with client
  - Clicked how to use user stories
- Things that worked well
- Things that didn't work well

# Things that worked well

“Communications with the client was really good”.

- What evidence is there that it worked well (“good”)?  
What did the client say?
- What techniques/processes were used?
- Can you explain why it was so good?
- What were the consequences of the good communications?
- Is there theory to say what you experienced was expected?
- YOUR TURN WITH YOUR NEIGHBOUR

# Things that didn't go well

- “We were always behind our plan”
  - Why do you consider this “bad” – was it unexpected? Against usual practice? Against usual theory?
  - How did you do the planning? How did you react as a team? Personally?
  - Can you explain why this happened? The root cause?
  - What were the consequences?
  - When did you realise it wasn't working?
  - What did you try to fix it- why did they work/ not work?
  - Looking back now, what would you do differently and why would the outcome be different?
  - What does theory relate to your experience?
  - YOUR TURN WITH YOUR NEIGHBOUR

# Critically Reflective Practitioners are...

reflective...

curious...

questioning...

open to

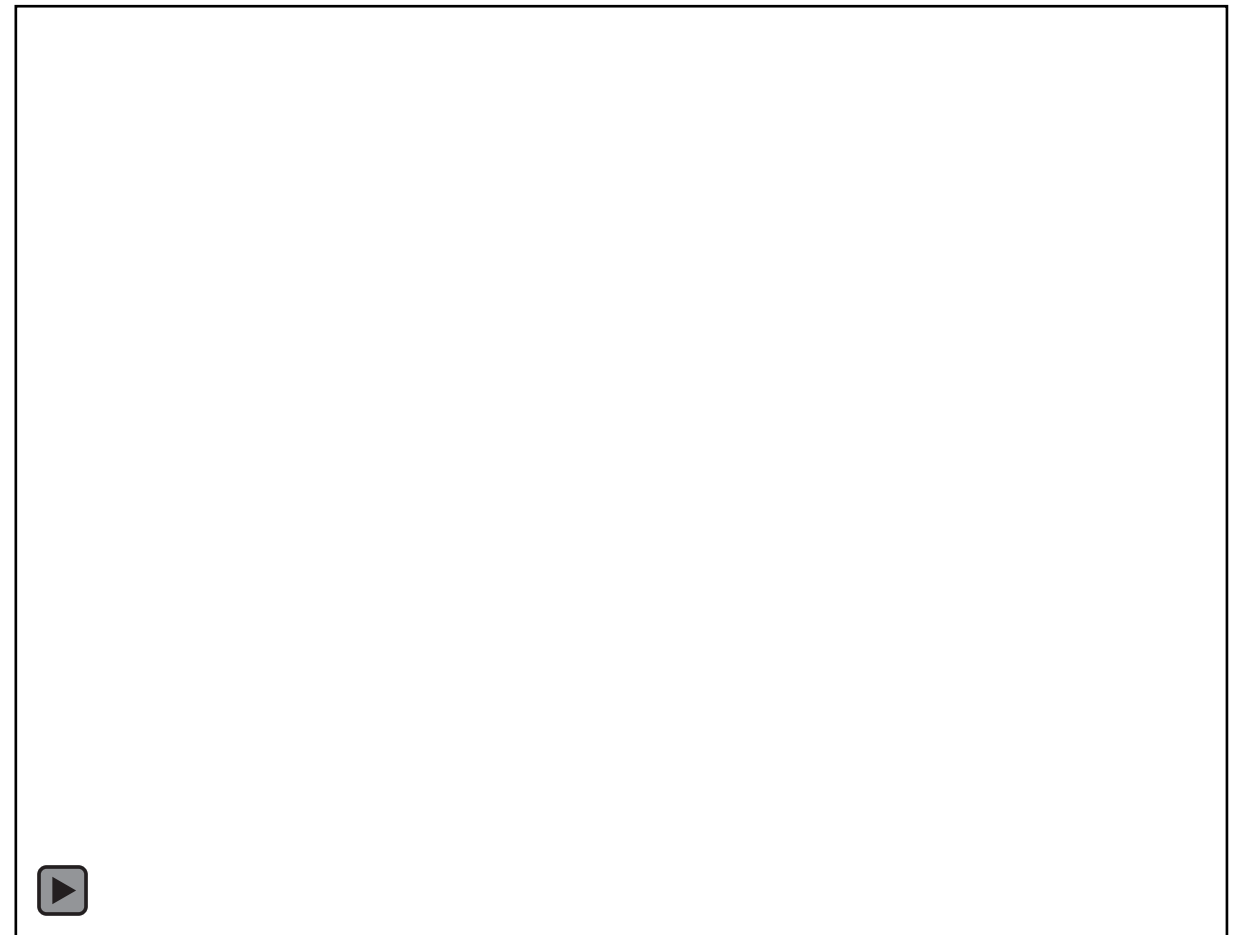
alternatives...

slow to believe...

good at

communicating and

supporting ideas...





# What sort of actions / words are a sign of critical thinking?

- You need to avoid general or vague (cliche) statements like..  
We had problems with communication
- We had trouble with the team
- The team went really well
- The client changing his mind was a real problem

# The key areas to look for critical incidents generally relate to ...

People, Process or Technology

For example:

Communications (with client, within team, with supervisor etc)

- Planning
- Monitoring or managing plans
- Managing change (eg client changing mind- maybe understanding better)
- Managing risk
- Managing time
- Working as an effective team
- Project (or software development ) methodology
- Technical issues
- Researching alternatives or feasibility

- YOU NEED TO PROBE THESE IDEAS AND ANALYSE THEM CRITICALLY BY ASKING QUESTIONS LIKE....  
Why?
- So what?
- What are the consequences of that?
- what caused that?
- what does that mean?
- what did I learn from that?
- What would I do differently next time and why would that change the outcome?

# Evaluating

- Remember that you are trying to be convincing and persuasive regarding your assertions or claims or points of view or explanations by providing strong ..... REASONING (logical argument)
- EVIDENCE (some incident or artifact OR RELEVANT THEORY or research that supports your points)
- You need to evaluate and judge what is STRONG reasoning and evidence.

The result of your critical thinking may be more questions that you have not yet answered

# Critical Reflection in Agile PM

- Daily Standups
- Retrospectives



# What is NOT critical thinking?

**DESCRIBING WHAT YOU DID IN DETAIL  
IS NOT EVIDENCE OF CRITICAL  
THINKING**

It is only the start .... now analyse it....