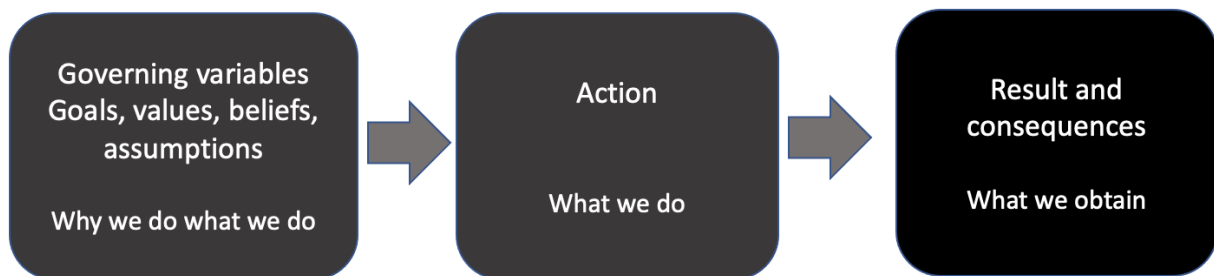


# Thinking tool

## Theories of action, single loop and double loop learning

Every goal-oriented action you take is based on some theory you have about how that action will lead to that goal (Bushe, 2010, p.130). Argyris and Schon argue that our actions are guided by theories we hold that are based on prior experience, and values etc. They call these theories for *Theories of Action*. *Theories of Action* can be understood as an internal mental map that influences what people do (actions), and the beliefs and values that drive what they do (theory actions), and the consequences of what they do, both intended and unintended. *Theories of Action* may also prescribe behavior at group, and organizational levels, but we will focus on individual level in this text. Exploring Theories of Action can help the participants of the PLC to understand why each one of the participants behave as they do, because they reveal the values and beliefs that drive behavior, and helps to understand reasons for disagreements. Exploring Theories of Action can also help the PLC to reflect on the efficacy of their theories, by testing them, and see if they need to be revised.

*Theories of action:*

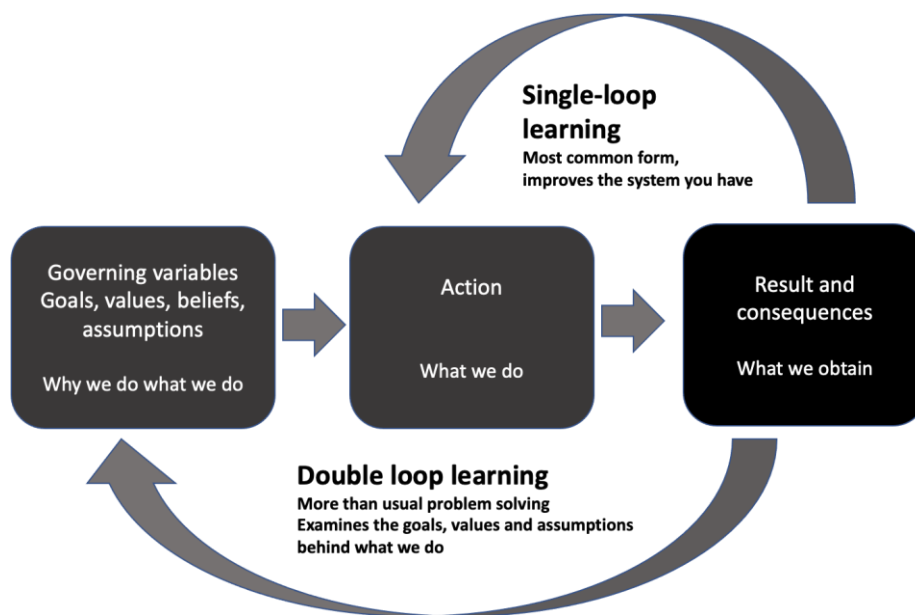


Donohoo and Velasco (2016, p. 69) present a template that can be used to engage teams in reflective practice, by reflecting on Theories of action, the template is meant to help the team to uncover individual experiences and bring them into the open, and then test them.

|                                   |  |
|-----------------------------------|--|
| What is the ideal?                | What is real?                          |
| What was expected?                | What occurred?                         |
| What actions were taken?          | What were the reasons for the actions? |
| What are alternative strategies?  | What is the next best move?            |
| What new assumptions are arising? | What do we need to learn more about?   |

As an extension of the idea of *theories of actions*, Argyris & Schön (1978) distinguish between single-loop learning and double-loop learning. Learning that does not question the underlying values and assumptions that drives the action is referred to as *single-loop*

*learning. Double-loop learning* occurs when theories are examined and revised, and underlying assumptions, values and beliefs are modified. If our theories of action are not challenged, they can be an obstacle to *Double-loop learning*, which means that the basic assumptions that govern our actions are not changed. Very often we let our assumptions get in the way of learning. Being open to learning means that you are willing to examine and evaluate values or assumptions that form the basis for your own and the groups actions, even in those cases where you think you are right.



A lot lies in communication. Dewey (1997, in Emstad & Birkeland, 2020) distinguishes between "ordinary thinking" and "reflection" and defines reflective thinking 'the active, persistent and careful consideration of any belief or supposed form of knowledge in the light of the grounds that support it'. This means examining our assumptions, and then looking at the facts that form the basis for these assumptions, and further reflecting on these, thinking critically, looking for alternative solutions and any new data that can develop the solution proposals (Dewey, 1997, in Emstad & Birkeland, 2020). Without an awareness of challenging others and your own theories of action, the PLC can maintain the status quo because they try to solve problems without challenging their theories of action (Emstad & Knutsen, 2021), as the reflection stays weak .

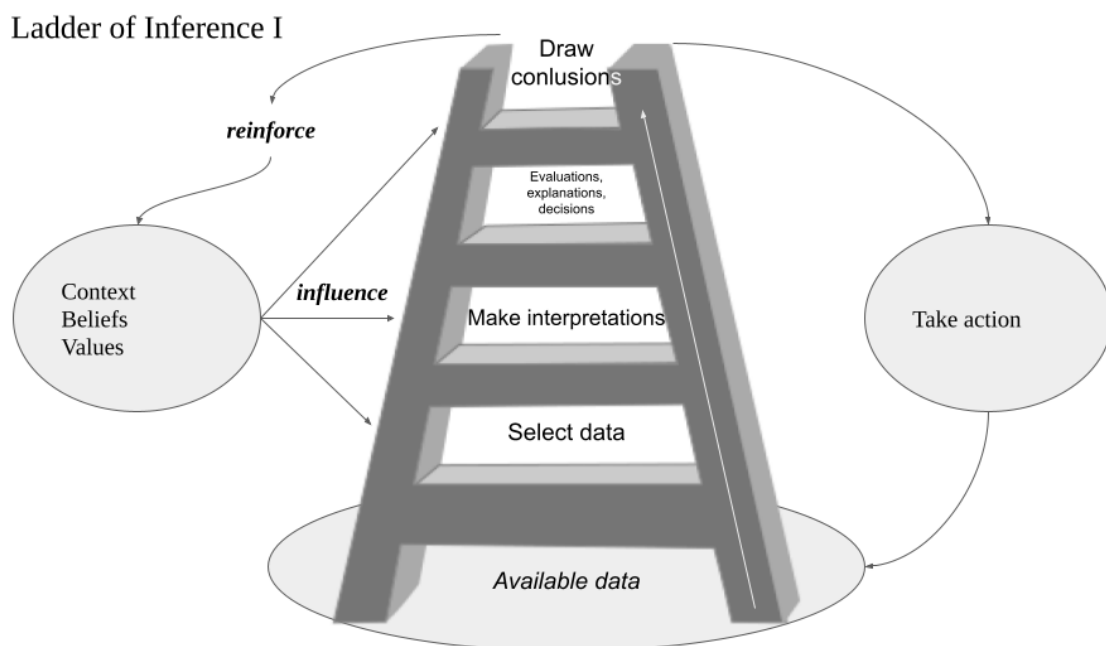
## References:

- Argyris, C., & Schon, D. (1978). Organizational learning A theory of action perspective. Addison-Wesley
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# Thinking tool

## The ladder of inference

The *Ladder of Inference* (Argyris, 1983), is a theoretical tool showing how we can go from data to making meaning of the data, and then taking action. The Ladder of inference can help to understand the automaticity of our thinking. Kahneman (2011) says that “the brain is a machine for jumping to conclusions”, and the Ladder of Inference explains how we very often are 'jumping to conclusions', sometimes in a matter of seconds, based on a very limited amount of data. Using the ladder can help us draw better and unbiased conclusions, as it provides a picture of how our prior beliefs and experiences lead us to notice certain things and ignore others, and then draw inferences about what it all means.



Starting at the bottom, there's all sorts of data from which we consciously or unconsciously select *certain* data and make meaning of it. This interpretation is influenced by our beliefs and our personal experiences. Based on this we make assumptions and draw conclusions, adopt beliefs and take actions based on those beliefs. This process creates a reflexive loop, where we unconsciously then continue to select data that confirms our already created beliefs.

We can actively use *Inquiry* (asking open and genuine questions) to understand how we came to have our beliefs, and how we came to our conclusions. Moving down the ladder helps our self and others understand how our mental models came to be, and reveal possible blind spots. We should train ourselves to communicate our beliefs, conclusions, assumptions, interpretations transparently as well as the data we selected to arrive there.

In short, from all the information available to us, we select and describe *particular* information, make meaning from it and then draw conclusions from which we respond. It's also a reminder about why we should challenge other people's conclusions, and whether they are based on true facts and reality. By reminding each about the ladder, the members of the

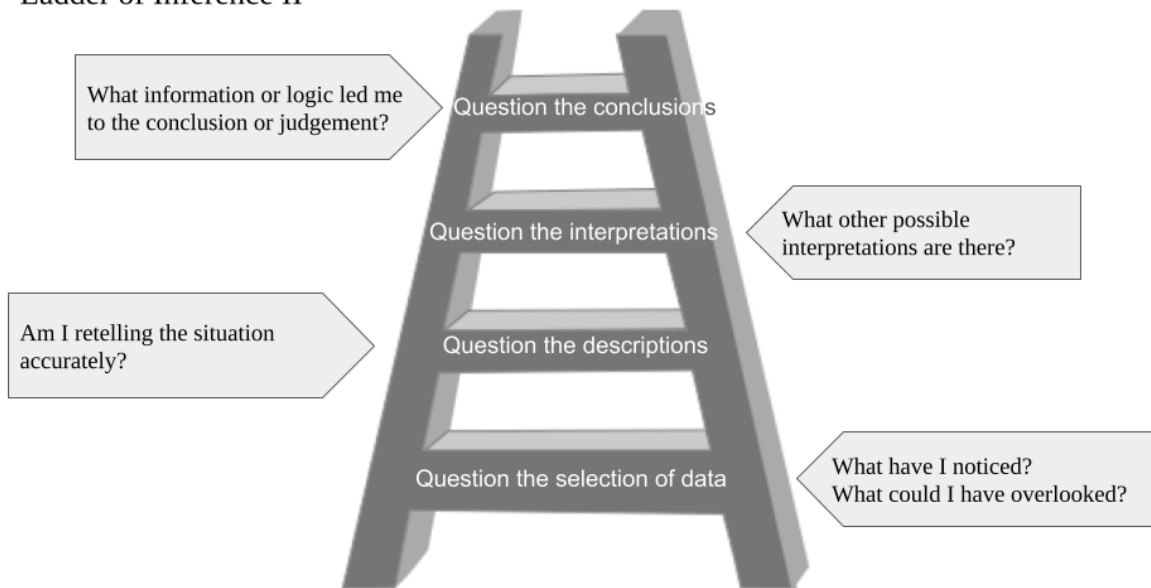
PLC can help each other to be more conscious of how fast they climb the Ladder of Inference, and thereby be in a better position to evaluate the validity of the reasoning and evidence that leads the PLC to its conclusions.

Look at these short videos – to better understand the tool:

<https://youtu.be/6Wb1mOod3q8>

<https://youtu.be/RwiELtWVyVc>

## Ladder of Inference II



*Don't run up the ladder - maybe you need to trace your steps down the ladder instead?*

## References

- Argyris, C. (1983). Action science and intervention. *The Journal of Applied Behavioral Science*, 19(2), 115-135.
- Kahneman, D. (2011). *Thinking Fast and Slow*. Penguin books.