Reflection applied on Systems Architecting

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Abstract

Reflection facilitates the learning process. We discuss a simple reflection model and provide some means for reflection.
Colophon

Merete Faanes from Buskerud University College created the educational flow *Reflective Practice*. Reflective Practice is a thread throughout the entire master Systems Engineering to stimulate students to relate *Education* and *Practice*.

These workshops are the result of the cooperation of Merete Faanes and Gerrit Muller.
When to Reflect

Reflection
Before Action

Reflection
In Action

Reflection
On Action

anticipation
preparation

concurrent

action

retrospective

--- time ---
Scope: What to Reflect on

- operational or life cycle context
- system of interest
- component or function of interest

- organization
- project
- team
- individual

- principle
- process or method
- procedure or technique
- tool or notation

- technical
- psychosocial
- means
Reflection Cycle

experiencing → reflecting → generalizing → applying → testing → observing → analyzing → interpreting → explaining → conceptualizing

source: Kolb's learning cycle
http://www.infed.org/biblio/b-explrn.htm
Example of Reflection Questions

What stakeholders are involved?
What are their needs and concerns?
What is our goal?
How did we get in the current situation?
What is going well, what is going bad?
What approach can we take?
What do we expect to happen?
et cetera
Recommended Reflection Report Content

subject or goal

description of your experiences

analysis

lessons learned

actions as follow-up

*avoid broad generic statements*

*illustrate with specific examples*