Abstract

Systems engineering requires lots of communication and facilitates it. Communication is a complex phenomena that requires a combination of skills. Some of these skills are “soft”, e.g. psychosocial. We will explore bilateral communication during this workshop.
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*.

This workshop is the result of the cooperation of Lia Charité and Gerrit Muller.
Pre-assignment

Fill in the pre questionnaire at

http://www.gaudisite.nl/RPCOMquestionnairePre.doc

Add your name to the filename when submitting it by email

Please submit as Word-file

The questionnaire results will be used in anonymized form for research of the effectiveness of this workshop.
9:00  welcome, last workshop, introduction this workshop
9:10  block 1: Communication about master project
10:20 block 2: Bilateral communication
11:30 block 3: Communication in your company
12:40 plenary discussion
12:50 pre-assignment next workshop, close
+ 15 min.

Discuss the master project claim and observables

Can you benefit from cooperation for this project?

+ 20 min.

Analyze the communication:

What has been communicated?

How was it communicated?

> be specific

> give examples

Results on flipover
Active listening: the art of the receiver to decode the message

- **Encoding**: Idea to be expressed, based on emotional state, relation with the other, the objective, the situation, age, status, education, cultural background.

- **Nonverbal Message**: Based on emotional state, relation with the other, the objective, the situation, age, status, education, cultural background.

- **Verbal Message**: Own interpretation of idea.

- **Decoding**: Based on emotional state, relation with the other, the objective, the situation, age, status, education, cultural background.

From: "Listening and communicating" by Lia Charité, www.liacharite.nl
Intense interaction needed for mutual understanding

to calibrate:
repeat many times with different examples, illustrations, and explanations
Two students discuss the master project; one observes

Communicate by first paraphrasing the other's message and then give your own message

Evaluate the way of communicating

be specific and concrete, provide examples

Results on flipover
Discuss and evaluate communication during your daily work.

Compare informal gatherings, meetings, documentation, telephone, telecon, emails, video, ....

be specific and concrete, provide examples

Results on flipover
Fill in the post questionnaire at

http://www.gaudisite.nl/RPCOMquestionnairePost.doc

Add your name to the filename when submitting it by email

Please submit as Word-file

The questionnaire results will be used in anonymized form for research of the effectiveness of this workshop.
Describe how far you envision yourself to be in the development toward an industrial grade systems engineer.

Describe in what direction you want to develop yourself (which does not have to be an industrial grade systems engineer).
Alternate assignment; only after permission of the teacher

- do the pre-assignment and submit this to the teacher (as all other students)
- go through the workshop questions yourself
- discuss the questions and your answers with a local colleague; do the paraphrasing experiment with this person.
- write a (max) 2-page document with your answers including examples and rationale behind the answers
- send this 2-page document by mail to another student and ask for comments
- update the 2 page document
- do the post-assignment, include what the feedback of the other student changed in your thinking
- send 2 page document and post-assignment to the teacher