QUESTIONING FOR COMPETENCY ASSESSMENT

We all think about our performance in some way, in routine work and when undertaking training and assessments. But how do we do this? Questioning is a tool that can be used by trainees and instructors to help give insight into our own performance, as **Emmanuelle Gravalon, Caroline Fauquembergue, Julie Baltet, and Sylvain Dumousset** explain.

KEY POINTS

- **Competency is mainly a non-observable process. The only observable parts of a competency are actions and results.**
- **Practising questioning makes it possible to verbalise some mental processes and become aware of how we understand a situation, form strategies, and evaluate performance and learn.**
- **Questioning can be used by instructors and trainees to help reflect on and improve performance.**

A competency is a combination of theoretical and procedural knowledge *(savoir)*, the ability to implement this knowledge in various situations *(savoir-faire)*, and behaviours adapted to the situations encountered *(savoir-être)*. However, competency is mainly a non-observable process: one can't read someone else's mind, one can't hear someone else's thoughts, and one can't feel someone else emotions. The only observable parts of a competency are actions and results. For both instructor and apprentice, this non-observable part of competency is an obstacle to competency assessment. The ability to reproduce successfully a competency and the expected result creates performance.

Assessment and validation of competencies are often mixed-up with an instantaneous measure of performance, thus highlighting the difficulty of describing a competency. The French Human Factors Team for ATCOs uses 'questioning' to support instructors and trainees in this skill building process. Practising questioning makes it possible to verbalise some mental processes and become aware of how we practise:

- I recorded the elements of the situation. I understand how I did it.
- I am able to explain my choices, my actions and the elements to watch out for, so that everything runs smoothly.
- The result allows me to validate the actions implemented, or to plan improvements for the next attempt.

When the student knows how they achieved the result, they will be able to reproduce that combination, and amend it when the circumstances vary.

Some examples of questions are below. These can be adapted to fulfil each objective.

1) Understanding: What are the characteristics of the situation?

- What did I see and hear, which helps me in building my mental picture of the situation?
- What is my knowledge related to this situation?
- What is my goal for this situation?
- What is my concrete general objective? What is my underlying personal goal?
- What personal and external resources are needed? Which of these are available?

Objective:

For both instructor and trainee, check the relevance of information gathering, and compare their mental pictures of the situation, and their objectives.

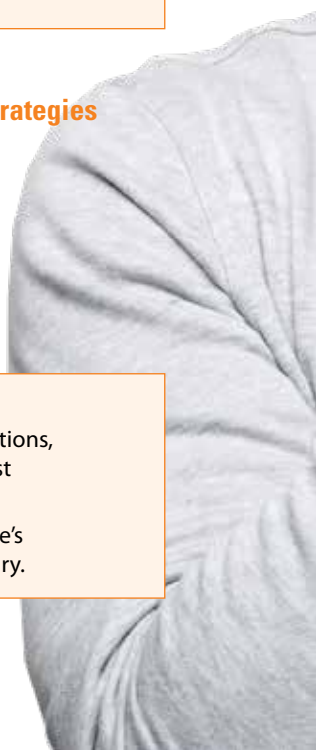
2) Strategies: What are the possible strategies to achieve the objectives?

- Do I imagine several solutions?
- What is the expected result for each?
- What obstacles have been identified and considered for each?
- Which one do I know best?
- What is my action plan?

Objectives:

Enable the trainee to verbalise different options, and the selection criteria for them (e.g., past success, available resources).

Enable the instructor to discover the trainee's 'library of strategies' and to enrich this library.



3) Evaluation and learning: How did it go?

- Did I roll out my action plan as planned?
- Which adjustments or corrections were necessary and useful? What feedback indicated this?
- Did the result fit my predictions?
- Which personal and external resources contributed to this outcome?
- What adjustments should be made for the next time?

Objectives:

Enable the instructor and the trainee to compare objectives and results.

Evaluate the competency.

Plan improvements for future situations.

Practising this kind of questioning helps to become aware that, for the same performance, each controller has constructed his or her own combination of knowledge, technical skills, and non-technical skills.

Questioning can be used by an instructor when debriefing as a tool for feedback. The debriefing becomes more factual and work-oriented. It helps to explain another way of dealing with such a situation. Questioning can be used by a trainee to reflect on their own performance (e.g., to compare intention to outcome) and to question what they observe (e.g., situation resolution that he or she witnessed), in order to reproduce or improve it. Questioning is however time-consuming, and so obviously cannot be implemented in real time during intense traffic.

When the instructor and trainee use questioning together, they can compare their own way of dealing a situation, 'speaking the same language' through the three stages of understanding, strategy, and evaluation and learning.

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