NATA Education & Advisory Services

# Building effective training and assessment systems

## A connected competence pipeline

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According to

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## The top three competency non-conformances are:

- Failure to document competence requirements for each function within the laboratory
- Inadequate records and documentation of competence
- Personnel not authorised to perform specific laboratory functions

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## What does the standard say…

**ISO/IEC 17025:2017 Clause 6.2 requires:**

- Competence requirements must **be defined and documented for each role**, including education, qualifications, training, knowledge, skills and experience.
- Personnel must be **competent for the activities they perform**, including understanding the significance of deviations.
- Duties, responsibilities and authorities must be **clearly communicated**.
- The laboratory must have **documented processes and records** for selecting, training, supervising, authorising and monitoring personnel competence.

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## What actually happens in practice

- Generic position descriptions stand in for real competence criteria
- A single sign-off replaces ongoing assessment
- Skills and knowledge loss go undetected
- Departing staff take undocumented know-how with them
- Training is treated as an event, not a system

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## A connected competence pipeline

Five topics, one system – each stage depends on the one before it.

1 Staff Competence | 2 Adult Learning | 3 Workplace Training | 4 Workplace Assessment | 5 Maintaining Competence

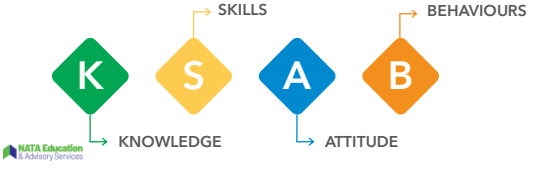
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## What competence is made of




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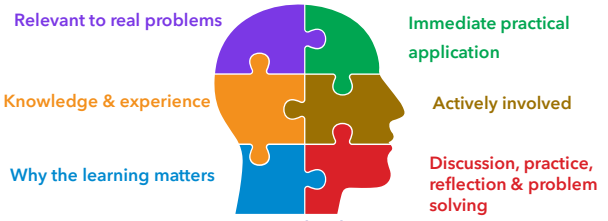
Training is what you show them; competence is what they show you.

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With children, we often teach the subject.

With adults, we need to connect the subject to what they already know, what they do, and why it matters.

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## Designing Adult Learning

| Start with the outcome. What should they be able to do? | Make it relevant. Connect content to their work. | Build on knowledge. Don't assume a blank slate. | Keep it focused. Prioritise what they need, not everything now. | Design for application. Include realistic examples & opportunities to practice. |
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Design from the learner's job backwards.

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## Delivering Adult Learning

| Facilitate, don't lecture. Involve the learner. | Ask before you tell. Draw out existing knowledge. | Make it active. Discuss, practice, solve & apply. | Respect experience. Use the expertise in the room. | Check & adapt. Respond to understanding as you go |
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**Good delivery makes the learner do the thinking**

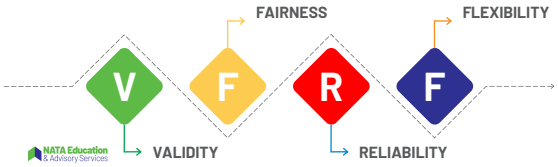
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## Principles of Assessment



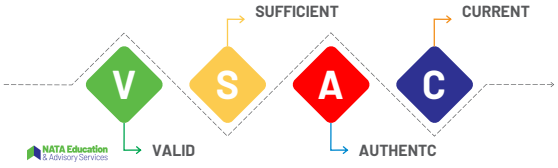

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## Rules of Evidence




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**Common assessment methods, used in any combination:**

- Direct observation of an activity being performed
- Monitoring the recording and reporting of results
- Review of work records
- Assessment of problem-solving skills

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**Competence is a status that has to be actively kept current, not a certificate you file away.**

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## TAKING THIS BACK TO YOUR LABORATORY

- Define competence clearly.
- Design & Deliver with purpose
- Assess what matters
- Keep competence current

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**Training & Assessing Staff Competence**

Apply best-practice adult learning principles to deliver successful on-the-job training and assessment outcomes in the laboratory.

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