

The design of training must be based on how people learn

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We can talk about learning in terms of two aspects: concepts, and relationships with other learners. We can break the learning process down into three stages.

Stages of learning

Stage 1: Conceptualisation – learners come into contact with the learning matter and try to interpret it in terms of their existing framework of understanding.

Stage 2: Construction – learners build their concepts through the performance of meaningful tasks.

Stage 3: Application – conceptualisations are tested and fine-tuned through use in applied contexts and importantly, through dialogue with others.

At the first stage, learners are encountering other people's concepts and trying to understand them in terms of what they already know.

At the second stage they are actively building new knowledge – combining their existing concepts with the new information and combining it into something meaningful.

At the third stage, interaction with other people, or dialogue, is important, to test out and refine their new knowledge.

Dialogue can occur at the earlier stages too. At these stages, learners may seek clarification and confirmation of concepts, and they may collaborate in building new knowledge.

Impact on training design

This framework offers practical guidance for the design of training programs and learning materials. Training programs have to address each of the stages of learning.

Stage 1

The purpose is essentially to present material. This could be through traditional, didactic presentations (lectures) or through participatory activities where the learner is immersed in simulated environments.

Stage 2

The purpose of training (or learning support) is to support the learner's task-based learning activity, and this could include cognitive tools (questions, problem-solving exercises) designed to encourage learners to think more deeply about the subject matter.

Stage 3

The trainer's objective is to provide learners with support to engage in dialogue and interaction with other learners to refine their understanding and skills in real situations. Suitable learning tools are dialogues, discussions, role plays, group projects and feedback from experts and other learners.

The framework suggests the value of blended learning approaches. Online learning or traditional lectures/instruction might address stages 1 and 2 of the learning process, while workshops and workplace projects might be used to realise stage 3.

Learning involves relationships

Learning relationships are at the heart of this approach. A learning relationship exists when we learn from, or through, others. The relationships can be of three forms – one-to-one (as in coaching or mentoring), one-to-many (eg teacher and class group) or many-to-many (eg peer groups and networks). The strength and effectiveness of learning vary within the different types of relationships. They also vary according to the nature of the content.

Learning relationships fall into three types that tend to correspond to the three stages of learning:

- *Explorative relationships* – learners are discovering new concepts. They initially seek more for descriptive information (what) than explanations (why) and the flow of information is primarily from outside in.
- *Formative relationships* – learners interact to build their understanding through guided activity, testing hypotheses and practices. The flow of communication in the relationship is likely to be balanced, with outputs from the learner matched by feedback on performance.
- *Comparative relationships* – learners have attained a level of expertise or become accepted as a member of a “community of practice”. They identify their level of knowledge in comparison with others and align their practice with the community or group. At this stage the primary goal becomes positioning of oneself rather than necessarily being interested in the acquiring of new knowledge. Learners may even become defensive about their knowledge.

Since this is a cyclical process, learners may be constantly moving through these stages and relationships with respect to different areas of knowledge.

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Reference

Mayes T and Fowler C (1999), Learning relationships: from theory to design. *Association for Learning Technology Journal*, vol 7, no 3, pp 6-16.