

Sequencing Learning Events

Introduction Instructors in traditional classrooms tend to —

- remove learning from the “real world.”
- use representational and vicarious experiences to compensate for reality.
- balance detachment from the real world with control over learning inputs.

Problem for technical instructors Technicians tapped as instructors tend to present extensive information at a high level of abstraction. They lecture about the structure of their hard-earned knowledge and expertise to a class of learners. They do this with the best of intentions. They want to “cut to the chase,” and give their students the pearls of their wisdom, the basis of their power.

Inexperienced instructors invite confusion and rapid memory loss in learners by—

- expecting them to process information first at the abstract, indirect, symbolic phase.
 - not basing instruction on concrete, sensory, direct experiences.
 - failing to bridge the learners’ world of concrete experiences with the experts’ world of abstract ideas by using analogies and other representations.
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Solution Technical instructors can solve problems connected to extensive lecturing.

Technical instructors can begin each lesson by setting up concrete, sensory, direct experiences as an orientation. The results of such an orientation nurture the learners’ knowledge-acquisition skills.

Constrained solution When resources are scarce or dangerous, then technical instructors can set up substitute, vicarious experiences that simulate reality as closely as possible. The results nurture the learners’ memory skills of recognizing or recalling past learning.

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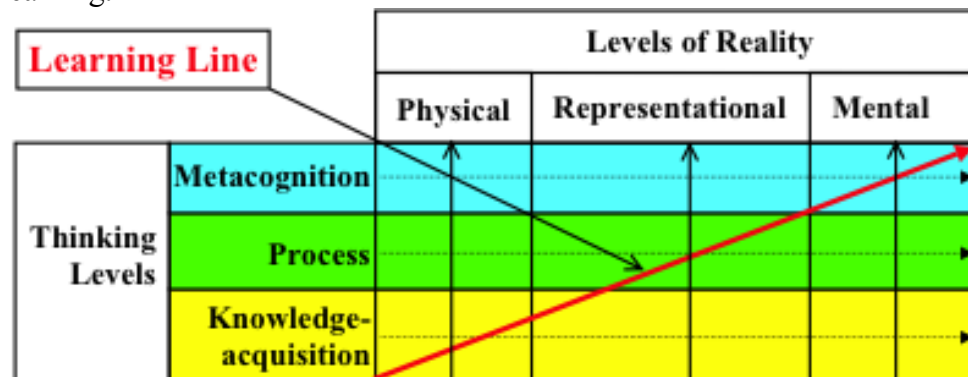
Guidelines

Apply these guidelines to be an effective instructor.

- Follow the Learning Line.
 - Choose representational experiences as close to reality as practical.
 - Introduce new information with a direct, sensory experience of concrete objects, events, and persons, whenever you have control over such resources.
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Matrix of the learning line

This matrix shows the learning line as a function of thinking levels, when moving through the levels of reality. The learning line naturally leads one through the developmental phases of learning.



Reference

The diagram of the learning line derives from Robert Wirtz, Curriculum Development Associates, Washington, D.C., 1980.

- Wirtz drew on contributions of learning theorists Jean Piaget, Jerome Bruner, Benjamin Bloom, and Hilda Taba to develop a model of learning.
 - Bruner and Piaget assert that learning moves through developmental phases from the physical, concrete, sensory, enactive phase involved in direct experiences, through a representational or figural phase, to the most abstract, mental phase involved with indirect experiences.
 - Bloom and Taba constructed a model of thinking that moves from the memory/recall level through problem solving/processing levels to the applicative and independent investigation levels.
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