

Instructional Design Principles for Adult Learners

By Vickey Quinn

Effective Adult Education

Adults maximize learning through the conscious application of certain educational techniques. The phrase “adult education” is often misused to mean any educational situation directed at a room full of adults. Instead, effective adult education is actually a collection of defined instructional elements for both the creation of the educational experience as well as the delivery of the training.

Synergest workshops all abide by these instructional design principles for adult learners.

According to adult training design expert Gary W. James:

1. Ensure conditions during training closely approximate conditions on the job.
2. Use multimedia to enhance - not distract from- the learning process.
3. Learning is better when you distribute practice over time.
(about 2 topics every 15 minutes with a new activity every 30 minutes)
4. Select test items that give learners the best opportunity to demonstrate the skill or action specified in the objectives.
5. Have learners practice as much as possible under conditions that reflect their real-world performance situations. Otherwise, they lose about 25% within 6 hours, 35% within 24 hours and 90% within 6 weeks.
6. Things learned last are remembered best (Law of Recency).
7. People learn the most when you present information in their preferred learning style (textual, visual, aural).
8. People relate learning to previous knowledge, skills, and attitudes.
9. The Law of Primacy states that the things learned first are usually learned best.
10. Apply instructional strategies that enhance the transfer of new material.

Synergest requires that all of our workshops are designed and presented with these adult learning best practices. Before being listed as a Synergest Series workshop, the workshop learning outcomes, objectives, concepts, design, interactivity, level of experiential practice, and delivery methods are all scrutinized.

Bloom's Taxonomy

Used for categorizing the level of abstraction of questions (higher level courses should strive for the higher levels of cognitive domain and individual courses should lead learners through the levels as the course progresses)

Level 1: Knowledge

Observation, recall, dates, places, events

Question cues: list, define, tell, describe, identify, show, label, tabulate

Level 2: Comprehension

Understanding, grasp meaning, translate into new context, interpret facts, compare, contrast

Question cues: summarize, describe, interpret, contrast, predict, associate, estimate, discuss

Level 3: Application

Use information, use methods, concepts, and theories in new situations, solve problems

Question cues: apply, demonstrate, calculate, complete, modify, classify, illustrate, solve

Level 4: Analysis

Seeing patterns, identification and organization of parts, recognition of hidden meanings

Question cues: analyze, separate, explain, classify, arrange, explain, infer, order

Level 5: Synthesis

Use old ideas to create new ones, generalize from given facts, predict, draw conclusions

Question cues: combine, integrate, modify, substitute, plan, create, design, what if

Level 6: Evaluation

compare and contrast, assess value of theories, make choices based on reasoned argument

Question cues: assess, decide, rank, grade, test, measure, select, judge, support, summarize

All Synergest workshops have at least one pre-workshop assessment, during-workshop evaluations and interactive practice with feedback, case studies, formal post-workshop tests, and a Quasi-Level-3 post-workshop back-on-the-job evaluation. Almost all of our workshops include multi-media components. Some of our workshops also include the use of a computer-based simulation. Synergest ensures that all of our workshops address all of these six levels of questioning.

Gagne's Learning Hierarchy

The Nine Events of Instruction

1. **Gain attention** - use novelty, uncertainty, surprise, or pose questions.
2. **Inform learner of objectives** - relate goals, describe required performance standards, describe criteria for standard performance
3. **Stimulate recall of prior learning** - relate new material to what is already known
4. **Present new material** - vocabulary, examples, cues (graphic, oral, auditory)
5. **Provide learner guidance** - samples, examples, practice questions, tools, materials, note taking, outlining, underlining
6. **Elicit performance** - recall strategies, rehearse, repeat, mind maps, mnemonic strategies, analogies, metaphors
7. **Provide feedback** - confirmatory, corrective, informative, analytical
8. **Asses Performance** - apply, test (objective- compare learner to ideal), normative (compare learner to classmates)
9. **Enhance retention and transfer** (sequence instruction)

Logical order

Deductive (rule to examples)

Inductive (examples to rule)

Inductive with Practice (examples to rule - students supply more examples)

Prerequisite Order

Hierarchical

Easy-to-difficult

Concrete-to-abstract

Content Organization

General-to-detailed

Procedural (order steps)

Conceptual elaboration

Theoretical (theory and application)

Synergest ensures that for every workshop, before attending the participants understand why the training is being conducted, what personal benefits they can expect, and how their personal work environment will be improved after participating in the workshop. During the workshop, Synergest consultants make sure each participant knows what the overall flow of the workshop is, where it is going, and why this sequence was used. And, of course, we ensure that participants *Have fun while learning ;-)*