Sequencing Instruction

Sequencing instruction/objectives helps ensure that learners are introduced systematically to what they must know and do to perform competently. There are nine approaches to sequencing performance objectives. The approach to use is dependent on the learning objectives and the instructional environment and at times the learners themselves.

Chronological sequencing – The content is arranged by time sequence with the presentation of later events preceded by discussion of earlier ones. Instruction is sequenced fro past to present to future. This is typically used with history.

Topical sequencing – When performance objectives are sequenced topically, learners are immediately immersed in the middle of a topical problem or issue. Learners are then led back in time to see how the problem originated and at times forward to see what will happen if the problem is not solved. For instance a recent newspaper article on water pollution could be the starting point for instruction on Agricultural Waste Management Systems.

Whole-to-part sequencing – Learners are presented with an overarching logic to govern what they should know. In this way, they can see how each part relates to a larger conceptual system. Learners are first presented with a complete model or a description of the full complexities of a physical object, abstraction or a work duty. Instruction is then organized around parts of the whole. Examples are the hardware in a computer system, the instructional design process, or the job of an employee development specialist. Continuing with the examples; in whole-to-part sequencing, instruction would go from computer system to components, from design process to steps, and from job to duties.

Part-to-whole sequencing – Learners are presented with each part of a larger object, abstraction, or work duty. By the end of instruction, they should be able to conceptualize the entire object or abstraction or be able to perform the entire duty. For the example immediately above, instruction would go from components to the computer system, from steps to design process, and from duties to the job.

Known-to-unknown sequencing – Learners are introduced to what they already know and are gradually led into what they do not know. For example in teaching how to develop Web pages using HTML, the instructor finds out how much the students know about the Windows environment and how experienced they are with the Internet before launching into instruction on HTML. The instructor is sequencing form the known to the unknown.

This worksheet/job aid was adapted from Mastering the Instructional Design Process, (2nd Ed.) (1998), Rothwell, William J. & Kazanas, H. C., Josey-Bass/Pfeiffer, San Francisco.

Unknown-to-known sequencing – Learners are deliberately disoriented at the outset of instruction. They are put in "over their heads." This approach dramatizes how little they really know about a subject or the performance of a duty with which they already feel smugly familiar. The aim of this approach is to motivate learners by showing them they need to learn more. An example is military boot camp.

Step-by-step sequencing – Learners are introduced to a task by either the steps in the task itself or the knowledge they must possess to perform competently. Performance objectives are sequenced around each "chunk of knowledge" or "specific skill." An example is training in resource conservation planning. Objectives could be sequenced around the nine steps or the knowledge necessary to complete the steps.

Part-to-part-to-part sequencing – Learners are treated to a relatively shallow introduction to a topic, move on to another topic that is also treated rather superficially and on to other topics in like fashion and eventually back to the original topic for more in-depth discussions and so on. This spiral type of sequencing is used to ensure that learners are introduced to topics on which learning is built. Training in valuing the differences in people is an example.

General-to-specific sequencing – Learners are introduced to the same foundation or core subjects and then given the opportunity to specialize. An example is Webmaster certification training where learners are introduced to core subjects and are then free to specialize in a developer track, a design/media track or an administration track.

Sequencing performance objectives can vary among units of instruction. The subject matter, the intended learners and the experience of the instructors govern the particular sequence chosen.

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