Conducting a Subordinate Skills Analysis

Subordinate Skills Analysis

Because of its complexity, instructional analysis, the identification of all of the skills and knowledge to be included in the instruction, is broken into two steps, goal analysis and subordinate skills analysis. Subordinate skills analysis, the process of examining each individual step of the instructional goal, focuses on this question: What should a person already know or be able to do before they can learn to perform the goal? Subordinate skills analysis is broken into two steps, the identification and analysis of the subordinate skills, and the identification of the required entry behaviors.

Techniques for Different Domains

Several approaches can be used to identify and analyze subordinate steps. Goals in which the steps are intellectual or psychomotor are termed “pure” goals and may be approached using the first technique; however, other more complex goals may require a combination of different approaches, also called information maps. The different techniques for conducting the first step of a subordinate skills analysis include:

- The Hierarchical Approach, in which “pure” goals are analyzed according to the question, “What must the student already know, so that, with a minimal amount of instruction, this task can be learned?” This question is repeated for each substep until basic performance skills are identified.

- The Cluster Analysis, in which verbal information goals are analyzed according to the major categories of information that are implied by the goal. Diagrammatically represented, cluster analysis of verbal information goals looks similar to the hierarchical layout, although it is labeled differently.

- The Instructional Analysis for Attitude Goals, which is itself broken into two substeps, the hierarchical analysis of the steps in the skill to identify the subskills that will be required if the learner chooses to do them, and the identification of the rationale for the learner making a particular choice. As shown below, attitude goals are represented in a box beside the corresponding intellectual or psychomotor goal. A similar convention is used to identify the rational, or verbal information, needed in the second step.

Entry Behavior Identification

Entry behaviors, the skills required of the learner before instruction begins, are identified once the subordinate skills are reduced to basic performance skills. The first step in entry behavior identification is to examine the subordinate skills analysis results for the skills that a majority of the learning population will already have mastered prior to the instruction. Once this is accomplished, a dotted horizontal line can be drawn above the entry behaviors on the results diagram. Identification of entry behaviors is a crucial step in the subordinate skills analysis since it determines where the instruction begins; if the line is drawn too low, the instruction becomes inefficient and counter reproductive, and if the line is drawn too high, the instruction is ineffective. A final consideration when identifying entry behaviors concerns the relationship between the target population and the instruction. If a specific group of learners are to be taught, then the entry behaviors are more likely to need fine-tuning and individualization.