

Jadual 2.7

Taksonomi Strategi Pengajaran. Adaptasi dari Park, (1983); Seidel et al., (1989).

Pre instructional Strategies

1. Instructional objective
 - Terminal objectives and enabling objectives
 - Cognitive objectives vs. behavioral objectives
 - Performance criterion and condition specifications
 2. Advance organizer
 - Expository organizer vs. comparative organizer
 - Verbal organizer vs. pictorial organizer
 3. Overview
 - Narrative overview
 - Topic listing
 - Orienting questions
 4. Pretest
 - Types of test (e.g., objective – true-false, multiple choice, matching – vs. subjective – short answer, essay)
 - Order of test item presentation (e.g., random, sequence, response sensitive)
 - Item replacement (e.g., with or without replacement of presented items)
 - Timing (e.g., limited vs. unlimited)
 - Reference (e.g., criterion-reference vs. norm-reference)
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Knowledge Presentation Strategies

1. Types of knowledge representation
 - Generality (e.g., definition, rules, principles)
 - Instance: diversity and complexity (e.g., example and non-example problems)
 - Generality help (e.g., analytical explanation of generality)
 - Instance help (e.g., analytical explanation of instance)
 2. Formats of knowledge presentation
 - Enactive, concrete physical presentation
 - Iconic, pictorial /graphic representation
 - Symbolic, abstract verbal, or notational representation
 3. Forms of knowledge presentation
 - Expository, statement form
 - Interrogatory, question form
 4. Techniques for facilitating knowledge acquisition
 - Mnemonic
 - Metaphors and analogies
 - Attribute isolations (e.g., coloring, underlining)
 - Verbal articulation
 - Observation and emulation
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Interaction Strategies

1. Questions
 - Level of questions (e.g., understanding/idea vs. factual information)
 - Time of questioning (e.g., before or after instruction)
 - Response mode required (e.g., selective vs. constructive; overt vs. covert)
2. Hints and prompts
 - Formal, thematic, algorithmic, etc.
 - Scaffolding (e.g., gradual withdraw of instructor supports)

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- Reminder and refreshment
 - 3. Feedback
 - Amount of information (e.g., knowledge of results, analytical explanation, algorithmic feedback, reflective comparison)
 - Time of feedback (e.g., immediate vs. delayed feedback)
 - Type of feedback (e.g., cognitive/informative feedback vs. psychological reinforcing)
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Instructional Control Strategies

- 1. Sequence
 - Linear
 - Branching
 - Response sensitive
 - Response sensitive plus aptitude matched
 - 2. Control options
 - Program control
 - Learner control
 - Learner control with advice
 - Condition-dependent mixed control
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Post instructional Strategies

- 1. Summary
 - Narrative review
 - Topic listing
 - Review questions
 - 2. Post organizer
 - Conceptual mapping
 - Synthesizing
 - 3. Posttest
 - Type of test (e.g., objective – true-false, multiple choice, matching – vs. subjective – short answer, essay)
 - Order of test item presentation (e.g., random, sequence, response sensitive)
 - Item replacement (e.g., with or without replacement of presented items)
 - Timing (e.g., limited vs. unlimited)
 - Reference (e.g., criterion-reference vs. norm-reference)
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Note: The listing of instructional strategies is not exhaustive and the classifications are arbitrary. From *Instructional Strategies: A Hypothetical Taxonomy* (Technical Report No.3) by O. Park 1983, Minneapolis, MN: Control Data Corporation. Adapted with permission.