

INSTRUCTIONAL STRATEGIES

Dr. Codone, inspired by Dr. Grady
TCO 363

Where are we in the ID process?

- Let's review what we have achieved so far.....
- What's next? Selecting the instructional strategy and the delivery media.

Recall your classes

- Challenge: on a piece of paper, write down at least 7 strategies your instructors – college, high school, or below – or even church or somewhere else – have used to actually deliver instruction to you.
 - What did they use?
 - How did they use it?
 - How effective was it?
- Be ready to share.

What is an instructional strategy?

- “prescription that describes an optimum method of instruction for different types of content” (Morrison et al., p. 150)
- In other words – how to teach the material
 - Choosing the delivery system
 - Sequencing and grouping chunks of content
 - Describing learning components
 - Grouping students
 - Lesson plans
 - Selecting media

What really facilitates learning?

- P. 166
- Motivation
- A Goal, Prerequisite & Subordinate Skills
- Practice and Feedback

Parts of an instructional strategy

- How to initially present the information to the learner
- How to increase the depth of processing (generative or information processing strategy)
 - Blooms Taxonomy, bottom to top
 - Gagne's domains, VI to IS

Four information-processing strategies

- Remember that to make sense out of new information, learners must relate it to existing information
- Well designed instructional strategy prompts learner to make these connections
 - Recall
 - Integration
 - Organizational
 - Elaboration

Recall

- Helpful for learning facts and lists
- Strategies include repetition, rehearsal, review, and mnemonics (devices that help recall facts)

Comprehension

- Useful for transforming information into a more easily remembered form
- Strategies include paraphrasing and generating questions/examples from the new information

Comprehension/Organization

- Helpful for identifying how new ideas relate to existing information
- Strategies include analyzing key ideas and categorizing

Elaboration/Synthesis

- Helps learners add their ideas to the new information
- Strategies include creating mental images or physical diagrams, sentence elaboration

How to teach facts

- Initial presentation – provide the student with experience with the objects of the fact
- Generative strategy is recall – rehearsal/ practice, review, mnemonics, elaborative interrogation

How to teach concepts

- Concept = a category used to group similar ideas to organize knowledge
- Initial presentation – concept name, definition, best example, additional examples
- Recall strategies – same as for facts (rehearsal, review, mnemonics)
- e.g.

How to teach concepts

- Integrative
 - Examples, nonexamples
- Organizational
 - Analysis of key ideas
 - Categorization
 - Cognitive mapping
- e.g.

How to teach principles and rules

- Principle/rule – expresses a relationship between concepts
- Two approaches to learning
 - Rule–eg: state rule, follow with example
 - eg–rule : give example, ask learner to determine rule (more active learning)

How to teach principles and rules

- Initial presentation – example or a demonstration of the rule
- Recall – same strategies as for facts
- Comprehension – paraphrase in own words or generate examples

How to teach principles and rules

- Organizational – identify key components of the principle and compare to similar principles
- Elaborative/Synthesis – develop a diagram that explains the principle
- e.g.

How to teach procedures

- Initial presentation – worked examples; show each step of the process
- Recall strategies – same as for facts
- Two steps in generative strategy for application
 - Learner must either paraphrase the process or use an elaboration strategy to embellish the process
 - Practice in applying the procedure
- e.g.

How to teach interpersonal skills and attitudes

- Present a model of the desired behavior (initial presentation)
- Develop a verbal or imaginal model (a real person helps)
 - Verbal – paraphrase key steps
 - Imaginal – offer an image (remember when”
- Mental rehearsal (covert practice)
- Overt practice (role play)

Preinstructional strategies

- Pretest
- Objectives
- Overview (like summary)
- Advance organizer
 - Comparative – compares new content to what learner already knows
 - Expository – when learner unfamiliar with content

Merrill's Strategies that Teach

- Goal
- Knowledge structure
- Presentation
- Exploration
- Practice
- Learner guidance

Gagne's Nine Events of Instruction

- Gaining attention
- Informing the learner of the objective
- Stimulating recall of prerequisite learning
- Presenting stimulus materials (content)
- Providing learner guidance
- Eliciting performance
- Providing feedback
- Assessing performance
- Enhancing retention and transfer

Your list of strategies

- How many of them followed the 9 events?
- How many of them took you from lower levels of Bloom to higher?
- From Gagne's VI to IS or CS?

ARCS Model

- Attention
- Relevance
- Confidence
- Satisfaction

Metacognition

- Knowing whether you are learning or not
- Self-monitoring
 - How do you build this into your instruction?

Rehearsal/Practice

- P. 218-219
 - Answer questions 1, 2, 3, 4, 6, 7, 8, 9, 12 at your tables, and be ready to discuss.

Most important...

- What's the most important concept you learned today?