

Strategy Scenario

Strategy: Concept mapping

Content: Instructional strategies
(ISD 613)

Title: The four families of cognitive strategies

Time Required: 30 minutes

Number of Participants: 10 to 15 students

Target Audience: IDD students at the University of South Alabama

Goal of Activity: To classify the cognitive strategies and the relationship among the strategies.

Purpose of Script: To demonstrate the use of concept mapping as a spatial strategy to organize information and facilitate the comprehension of cognitive strategies.

Learning Outcome(s), Gagne's Taxonomy: Defined concepts

Learning Outcome(s), HEO Taxonomy: Comprehension

Learner Characteristics: Students who have finished at least a bachelor degree and are interested in instructional design and development or cognitive psychology.

Entry Skills: Average intellectual skills of the graduate school students, as determined by GRE score. In addition, ability to use computers (at least word-typing) and background knowledge of computer program *Inspiration*.

Setting: Computer lab (Room 3302)

Media: A live instructor, computers with computer program *Inspiration*, floppy disks which the students have been asked to bring to the class, computer projection panel and overhead projector.

Process:

1. The instructor will say, "Today, you will use concept mapping to grab a big picture of cognitive strategies." He or she will divide the class into four groups. Then, the instructor will assign each group to construct a concept map of the certain family of cognitive strategies.
2. For example, the instructor will say to a group of students, "Your team will make a concept map of the chunking strategies. You need to include all the types of the chunking strategies and graphically display the relationships of the strategy types."
3. The instructor will say to all the students, "You should make a legend of the relationship in the map. Also, you should select the right type of the concept map for your family."
4. The instructor will ask the students to make a concept map and save it in a floppy disk in 20 minutes. The groups will open the program called *Inspiration* and construct concept maps.

5. When 20 minutes pass, the instructor will ask each team to use the faculty computer to project the image of the concept map.
6. When each group shows the concept map, the instructor should facilitate the class discussion by asking the students the following question: Are the relationships of the strategy types accurately displayed in a concept map?
7. The instructor will reinforce the teams' efforts and give them feedback. All the students will receive the concept maps produced in class.

Strategy Assessment:

Ask the students how they remembered the conceptual relationships of the cognitive strategies.

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References:

West, C. K., Farmer, J., & Wolf, P. (1991). *Instructional Design: Implications from Cognitive Science*. Englewood Cliffs, NJ: Prentice Hall.