

Description of a Divergent Discovery Style*



What classroom image would you see between the teacher and learners that would indicate the structure of the Divergent Discovery Style?

In this style you would see that the teacher designs a single or series of problems/ situations/questions that seek multiple solutions to the same problem. The task is new to the students. Each student is invited to discover new possibilities, as they produce multiple (divergent) responses to the specific problem. The teacher acknowledges the production of multiple ideas rather than any singular idea.



The content in this style is new and not known in advance to the learner. Styles F-K promote different structures for discovery learning and different cognitive operations.



Learning Focus

The learning focus of the Divergent Discovery Style is to produce, within the same set of cognitive operations, multiple discovered responses to one or a series of unfamiliar questions or situation. Each learner produces new multiple ideas that previously were not known. Divergent Discovery seeks to expand the parameters of thinking about content beyond the known and expected.



Design a movement sequence that incorporates three descriptive action words selected from EACH of the three categories provided (total of nine different movement units.).

Arrange these descriptive words into a movement sequence that travels from point A to point B and back to A.

For example:

Moving words - crawl, jump, spin... Expressive words - shake, float, twist... Transition words from low to high - drop, shrink, expand...



All subject matter has content that is appropriate for the different teaching styles. Physical activities were selected to more visually convey the decision making concept of each style.



The Anatomy

In the Anatomy of the Divergent Discovery Style, the role of the teacher (T) is to make decisions about the subject matter topic and the specific questions and logistics to be delivered to the learner. The role of the learner (L) is to discover multiple designs/solu - tions/responses to a specific question.

[★] The arrow represents the decision shift from the Convergent Discovery Style-G to the Divergent Discovery Style-H.



Style Summary

In Divergent Discovery the teacher makes all subject matter decisions including the design of the single or series of questions/situations/problems that seek multiple solutions to the stimuli. The stimuli is new and unfamiliar to the student, therefore each student is invited to discover new possibilities, as they produce multiple (divergent) responses to the specific problem. The teacher acknowledges the production of multiple ideas rather than any singular idea.



Subject Matter Objectives

When the Divergent Discovery Style is achieved, the following subject matter objectives are reached:

- To discover and produce multiple responses or solutions to a question or problem
- To experience divergent production in specific cognitive operations
- To view some aspects within content as developing and evolving, rather than static
- To develop the ability to verify solutions and organize them for specific purposes
- Others



Behavior Objectives

When the Divergent Discovery Style is achieved, the following behavioral objectives are reached:

- To engage in divergent discovery-the production of multiple responses that can satisfy a stimulus
- To activate divergent thinking in the cognitive operations designated by the stimulus
- To become sufficiently emotionally, cognitively, and socially secure to move beyond memory to risk producing alternative ideas
- To accept that an individual can approach problems or issues in different ways
- To tolerate others' ideas
- To feel the emotional and cognitive energy that the production of ideas can generate
- When appropriate, to engage in the Reduction Process (the Possible-Feasible-Desirable process to examine solutions)
- Others