



LESSON 7

(Or Lessons 7, 8, 9, 10, 11, 12, and 13; see Main Activity)

RATIONALE

By this time the children should have a good understanding of the task using the fun sheets. It remains to secure the “arbitrary relations” schema by showing the value of using the more general rule (the line changes color, or the line changes size) rather than a highly specific rule (the line changes blue to red, or large to small).

MAIN ACTIVITY

This lesson requires several days of small group lessons, the number depending of the children’s ability to grasp the concepts of change-by-rule and identification of the more general rules (color, shape), as well as negative rules (what the line does not change). Use, successively, Transformation Fun Sheets B-02, B-03, B-04, B-05, B-06, B-07, and B-08. For younger and less advanced children, one sheet for each day’s small group lesson will be sufficient. For older and more advanced children, a faster pace of 2, 3, or even 4 fun sheets within the same lesson will help to keep the children interested and engaged with the task. Proceed with each sheet as in previous lessons: Direct attention to the top row, ask the children to find the rule that says what the blue line does and then to apply the rule in each succeeding row in order to find which figures is correct (obeys the rule). Ask what the blue line does (changes size) and does not do (does not change color or shape). By the second or third fun sheet they should understand the exclusive nature of the rule (change one, and only one, characteristic, in this case size makes that change in both directions. Use the previous strategy of challenging the children’s responses by asking them to say what is wrong with the other (incorrect) figures.

VARIATION

Play “tell me all about.” Ask children, one at a time, to describe something that is in the room, without saying what it is. For example, “It is attached to the wall,” “It is in a corner of the room,” “It is smaller than I am.” The rest of the children must guess what is being described. Give each child a turn at being the “describer.” Each time, ask all the children to discuss (a) how complete the description was, that

Cognitive Functions

1. Abstracting arbitrary relations
2. Using multiple sources of information
3. Being precise and accurate
4. Labeling

is, whether the describer covered the essential characteristics of the object, (b) how precise, and (c) what “arbitrary relations” were described (e.g., color, size, shape, location, usefulness).

GENERALIZATION ACTIVITY

Play “tell me all about” again, with a different rule. This time, ask the describers to focus on non-essential characteristics, that is, ones that are only incidental. Then ask the children to discuss when it was easier to guess what was being described.

BRIDGING DISCUSSION

Discuss the importance of being precise and accurate. For example, ask the children to imagine being ill, going to the doctor. What would happen if the doctor said, “Well, I think you might have sort of a cold, or maybe it’s the flu. I think I have seen something like this before. Here, take this prescription to the pharmacy, get it filled, and take some of it every now and then.”

On other days: Accuracy and precision in math. Accuracy and precision in cooking, following recipes, or sending a rocket to the moon.

OTHER BRIDGING DISCUSSION

Home:

School:

Peer Group:

Other:

COGNITIVE MASTERY CRITERIA

The children should understand negative as well as positive aspects of rules and be able to apply them. They should also be able to name the arbitrary dimensions of change (color, size).

