From Colors: Theories, Systems, and Applications (Cosmetology)

Students in this vocational education course had read about the “season” system of color matching and had seen a short videotape demonstrating how this system is used to help clients match the colors of clothes and makeup to their hair and skin colors. To assess the students’ understanding of which colors go with which “seasons”—four categories of skin and hair coloration—this instructor used a Categorizing Grid. The grid simply consisted of a large rectangle divided into four smaller ones, labeled for the four seasons. Students were given a list of twenty-four color names and asked to write them in the appropriate boxes for the seasons they matched.

To her dismay, many of the students did poorly on the assessment. After discussing the feedback with them, she began to suspect that many of them either did not know the color names well or could not associate them with the tones they represented. She knew that many of her students were strong visual learners but poor readers. To test her hypothesis, she constructed a second Categorizing Grid, this one a large poster with pictures of models representing the “season” types. She also made a poster with samples of the twenty-four colors next to their names. The feedback on this second assessment bore out her hypothesis: most of the students did very well in visually categorizing the colors with the “seasons.” The instructor followed up by explicitly helping students connect the verbal and visual information in that and subsequent lessons.

From Comparative Animal Physiology (Zoology/Biology)

At the end of two weeks of work on mammals, this zoology professor decided to assess his class’s skill at categorizing mammals visually. He did the assessment in two stages, projecting numbered slides and directing students to write the numbers in the correct boxes on mimeographed grids. For the first assessment, he used a grid divided into boxes for the three mammalian subclasses: Prototheria, Metatheria, and Eutheria. He projected thirty slides of animals, with the examples more or less evenly divided among subclasses. He was pleased but not surprised to see that the class did quite well, with only a few confusions here and there. At the next class meeting, he asked students to categorize thirty-five slides of members of subclass Eutheria into seven of its major orders. Results on the second assessment were very uneven. About half the class did extremely well again; the other half, rather poorly. The professor went over the results of both assessments quickly and suggested the most critical areas for review, reminding students that the midterm would include questions requiring exactly this sort of categorizing.

From Introduction to Management Theory (Business/Management)

To get an idea of how well her students were understanding the distinctions between the concepts of Theory X and Theory Y management (MacGregor, 1960, especially chaps. 3–4), this business professor decided to use the Categorizing Grid. She began by jotting down a list of
about a dozen terms and short phrases she associated with each concept. She made sure that each item clearly related to one theory or the other, and she discarded those that could be categorized in either camp. She then made an overhead transparency with the concepts, Theory X and Theory Y, in large letters at the top, followed by a list of the two dozen terms in more or less random order. In class, she gave the students five minutes to sort the terms into two lists under the two concepts and then collected their responses.

By quickly reading through the responses, the instructor realized that the students had focused almost entirely on the human-nature and motivational aspects of these two theories, neglecting the managerial and organizational consequences. In other words, students had little trouble categorizing the terms that related directly to Theory X or Theory Y in the abstract, but they did less well with those items related to applications. Since she especially wanted the students to remember possible applications, that information gave her a clear sense of what to stress in subsequent class meetings.