

## ***Summary of Item Analysis Procedures***

*Assessing Music Learning*

### **Difficulty Level**

1. Count the total number of students answering each item correctly.
2. For each item, divide the number answering correctly by the total number of students.
3. This gives you the proportion of students who answered each item correctly. This figure is called the item's *difficulty level*.
4. *Caution:* The *higher* the difficulty level the *easier* the item, and vice versa.

### **Discrimination Index**

1. Compute each student's score. (i.e., count the number of items each student got correct.)
2. Divide the class into groups on the basis of total score (e.g., 50% high and 50% low, or 33% high, 33% middle, and 33% low).
3. The high and low groups must be the same size. The middle group is not needed in computing discrimination index. (e.g., 27% high and 27% low-46% middle not used.)
4. For each item, count the number of students in the high scoring group that got the item right.
5. Divide this number by the total number in the high scoring group, for each item.
6. Repeat steps 4 and 5 for each item, this time using only the low scoring group.
7. For each item subtract the proportion of low scoring students who got the item right from the proportion of high scoring students who got it right. The remainder is the *discrimination index*.

### Effectiveness of Distractors (Multiple-choice items only)

1. Count the number of students marking each response to each item.
2. For each response category, divide the number marking this response by the total number of students responding to the item.