### **INTRODUCTION**

Once a test has been administered and the results collected, examinees' responses can be scored. Examinee answer sheets are first scanned, and then an item analysis is conducted. If the item analysis reveals any issues, the problematic items may be re-keyed or dropped from operational use. If these corrections are needed, the exams are then rescored. Once scoring is complete, the passing score that was set for the exam is applied. Next, it may be useful to compute the proportion of examinees who were classified as masters and non-masters, or to plot a frequency distribution of all examinees' test scores. Finally, score reports for the individual examinees are prepared. Each examinee's raw score (that is, the number or proportion of items that the examinee responded to correctly) is often converted to one or more other types of scores. Various types of scores that an exam program might choose to provide on the examinees' score reports include the pass/fail decision, diagnostic information, the examinee's percentile rank, and the examinee's scale score.

### **Types of Scores**

# **Pass/Fail Classifications**

For many certification and licensure exams the only score that is reported is a simple pass/fail classification decision. When the purpose of the test is primarily or entirely to make this classification decision, this level of information may be sufficient. The terms used may be pass/fail, master/non-master, or other simple classification categories. In some exam programs, examinees are classified into more than two groups. And, some exam programs offer diagnostic information for those examinees who were classified as non-masters.

# **Diagnostic Scores**

Some exam programs find it desirable to provide examinees with diagnostic information about the quality of their performance on the test. This may be particularly relevant for examinees who failed the test, so that they will be able to make targeted improvements before retesting. In one simple type of diagnostic reporting, examinees are told the proportion of items they responded to correctly and incorrectly in each of the content areas of the exam.



#### **Percentile Rank Scores**

Another type of score that is frequently reported is the percentile rank. The percentile rank has a norm-referenced type of interpretation. That is, an examinee's performance on the test is compared to the performance of a specific group of examinees. The percentile rank reports an examinee's relative position within the specified group; more precisely, the percentile rank reports the percentage of that group of examinees who earned scores below that of the examinee.

### **Scale Scores**

Examinees' scores may also be reported as scale scores. Like percentile ranks, scale scores indicate an examinee's relative performance within some particular group. For example, the examinees' scores can be reported on a scale with a mean of 50 and a standard deviation of 10. An examinee who earned a scale score of 70 can be said to have clearly outperformed an examinee with a scale score of 65. All of the test forms of an exam program can be converted to the same scale. This allows direct comparison of examinees' reported scores across the different test forms. When you are developing the score scale itself, you can select any set of scale values, but it is usually helpful to avoid negative numbers and decimals. It is also worthwhile to avoid scale values that could easily be misinterpreted (e.g., a scale score range of 0-99 might easily be confused with percentile ranks).

## **Summary**

After a test has been administered, several further steps are conducted before examinees' score reports are produced. These steps include scanning the answer sheets, conducting an item analysis, reviewing the results of the item analysis and making any necessary changes, and then rescoring the exam if necessary. Once these steps have been completed, the passing score is applied and score reports are produced. Depending upon the needs of the exam program, a variety of types of scores may be provided on the examinees' score reports.

