General Principles of Interpretation

Principle 1

The rehabilitation professional should communicate evaluation information at the level of the client's understanding. By the time interpretation comes around the professional should have some knowledge of the client's mental abilities as well as the deficits that may limit the client's capability of understanding important assessment facts.

Principle 2

The recommendations that are offered during the interpretation session should be made in terms of alternatives so that the client can then make a choice. Biggs & Keller (1982) suggested that it is the client who basically interprets the test information. However, the professional must know the different options that is available for the client. The DOT (dictionary of occupational titles) is a great tool to use. The DOT identifies the many occupational choices available in the labor markets and gives the requirements for each job.

Principle 3

The client should participate as much as possible. If clients participate in gaining an understanding of assessment results, they will then be likely to introduce new information about themselves from other sources and to produce new insights regarding the significance of all the information (Goldman 1971). Promoting client involvement ensures that the client will appropriately evaluate the test results (Biggs & Keller, 1982).

Principle 4

It is not the information from the test that is so important, but the rehabilitation professional and client's perception that are the most important. One emphasis should be on the client's attitudes and readiness and attitudes, but the professional should also be aware of the client's views toward themselves as clients and toward the rehabilitation process.

Principle 5

During the interpretation process, the professional should avoid persuasive methods that might convey brusqueness or aggressiveness.

Principle 6

The professional should be as familiar as possible with the different tests, measures, or approaches used during the client's evaluation.

Principle 7

The client should not be comforted with unsuspected, negative information. Always remember that this is a teaching and counseling opportunity for the rehabilitation professional, but it is primarily a learning session for the client.

Achievement Tests

The primary purpose of achievement tests is to assess the level of acquired academic skills gained from past educational and vocational experiences. Three academic areas are ordinarily measured: reading, spelling and mathematics. Some achievement tests vary from those basic three areas.

Reading

A typical first step in a testing program is the determination of a person's reading level, usually reported as a grade level. The reason for this is that most tests to follow usually require a specific level of reading in order to understand the questions.

There are two basic constructs of reading, phonics and comprehension. The test administrator should be aware that not all achievement tests measure both. An achievement test that measures only phonics (or word recognition) may give an inaccurate estimate of a person's actual reading level. For example, a person with dyslexia (a reading problem) may do better on a <u>comprehension</u> test due to the fact that he or she is a contextual reader. A contextual reader uses all the words in a sentence to help interpret what is being asked or said. Therefore, it is suggested that tests that measure word meaning (comprehension) might be better indicators of actual reading level for disability such as the learning disabled or the hearing impaired.

A common misinterpretation of reading level is the assumption that a high correlation: exists between a person's ability to read and his or her intelligence level. When the client has a very low reading level, the evaluator should ask why. There may be several reasons including learning disabilities, hearing problems, brain injury or damage, mental retardation, or a high rate of absenteeism from school.

When a person has a low reading level, an intelligence test may be considered to determine if there is a discrepancy between the expected reading level, based on the intelligence level, and the actual tested reading level of the individual.

Spelling

A primary use of spelling tests results for the evaluator is in regard to the client's writing competency. Even though the spelling grade level may be the same for two individuals, there may be different levels of writing competency. The evaluator might do an item analysis and find that one individual has slight technical problems whereas the other individual's spelling can't be understood. The difference is that the first person is able to communicate in writing while the other, because of extremely poor spelling, is not able to communicate through writing.

It is not unusual for clients to be poor spellers. However, with the use of computer technology, (e.g., Spellchecks) spelling.problems can be compensated.

Math

Math skills may be affected by the length of time since the individual has studied math or used math. Therefore, math achievement levels mabe increased with remedial lessons.

Interest Inventories

Interest Inventories have no right or wrong answers, and no pass or fail grades. An interest inventory helps you identify your interests, especially those related to the world of work. It is designed to assist you in identifying training, education, or careers with activities that you might like doing. The U.S. Department of the Interior web site (http://www.doi.aov/octc/holland.html) provides an outline version of the Holland interest types inventory that provides for a self-report of interests and skills, as well as sample occupations that may be matched to these interests and skills.

Work Values Instruments allow you to pinpoint what you value in jobs (such as achievement, autonomy, recognition, support, and conditions of work). You can identify occupations you are likely to find satisfying based on the similarity between your work values and the characteristics of jobs. The Buros Institute maintains a listing of various work values and vocational interest inventories. They are available online at www.unl.edu/buros/indexl8.html.

Personality Measures help to identify your personal style in dealing with tasks, data, and other people. Your personality can be well suited for some kinds of jobs and not as well suited for other kinds. For example, if you are an outgoing person, you might prefer working with people most of the time, while another person might prefer working alone. An understanding of your personality helps you to make decisions about training programs, which jobs to apply for, or which career direction to take. Information employers must consider before administering personality tests is available on-line www.smallbiz.findlaw.com/text/. The Buros Institute maintains a listing of various personality tests. It is available online at www.unl.edu/buros/indexI2.html.

What Do the Test Scores Mean?

Question: How soon will I know the results of the test I took?

Answer: Each test has its own scoring method and each method is different. If the tests you take can be scored on-the-spot, results will likely be available the same day. Other tests take more time to score. For example, some tests may need to be processed through a computer that reads your answers. Some need to be sent to the publisher for scoring and may take a week or more. Still others will be hand-scored and double checked by another person.

You may get the results of a test within minutes after taking it. You maybe asked to check back by phone to see when your test results will be ready. You may even get them in the mail.

Score self-assessment tests carefully. These tests are designed so you can interpret the results yourself. Go over the instructions for interpretation and apply them to your test. Use your couunon sense to match these results to what you already know about yourself and to the results of other assessments you may have taken.

The important thing for you to remember is to *ask,* at the time you take the test, when and how you will get the results. If the test is suggested by a career counselor, you may want to schedule an appointment with the counselor to go over the test results soon after receiving them.

Question: Test scores often confuse me. What do the scores mean?

Answer: Scoring systems will vary depending on the test design and the intended use of the test scores. For some of the tests, you may have a number or a letter score. (Remember the 93% or A- you got in school? The scores may look like those, or they may look different.) Some tests may show you a graph; some scores may be descriptions.

Always read written explanations of the scores that are provided; they may indicate something different than you think. Ask at the test site for help in understanding your scores. If a counselor is available to help you understand your scores, listen carefully.

Question: What kinds of scores will I get?

Answer: Test reports may provide several different types of scores. The raw score (which you may or may not see) is a count of the number of right answers (or wrong answers). It does not make sense without some other information such as: the highest possible score or the average score.

Most raw scores are changed into converted scores to give the scores meaning. Converted scores include grade equivalent scores, standard scores, ranked scores, and percentile scores. A grade equivalent score indicates a score that is average for that school grade.

> ### Example of a grade equivalent score:
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> An electronics technician training course requires that trainees have eighth grade math comprehension skills. Suppose that you score 9.3 on the math section of an achievement test. A score of 9.3 is average for a student three months into the ninth grade. Based on your math score, you could expect to be accepted into training.

Standard scores indicate where your score lies in comparison to other people who took the test (also known as the reference group). To understand your standard score, you must also know the "average " score, called the mean score, of that reference group.

Example of a standard score:

Suppose you take an ability test and get a score of 72 on the vocabulary section of the test. The test information shows that the average (mean) score for that section is 50. There is also a graph showing that most people score around 50 on the vocabulary section. Based on that information, you know that your score is better than the average and higher than the score most people get on that section of the test.

Ranked scores are developed by collecting many scores from a test and dividing them into groups (like high, medium, and low).

Example of a ranked score:

Suppose you take an interest inventory to help you decide which of several training programs to choose. The result shows high interests in science and in outdoor activity. Your scores for these interests are among the top third of people who completed the inventory. Using the interest scores, you might select a course in environmental science that satisfies both interests.

A percentile score identifies how your score compares to the scores of other people who have already completed the same test. It does not tell you how many answers were right or wrong.

Example of a percentile score

Suppose you take an ability test and your dexterity score is at the 50th percentile. It means you did better on that part of the test than half of the people taking the same test.

A percentage is different from a percentile. It tells you what percent of your answers were right. You probably remember percentage scores from school. A percentage measures you against the test questions.

Example of percentage:

Suppose that on a pre-employment test you correctly answer seven questions out of ten. Your score is 70% (7 out of 10,).

A cutting score (or cut-off score) is the minimum passing score. Candidates scoring at or above the cutting score will be accepted or will be considered in the next phase of the assessment process; those below may be rejected. The cutting score may be decided by measuring test performance against performance required on the job.

Example of a cutting score based on performance:

A production contract says the company must ship 700 boxes of nails a day. Each production worker must pack 30 boxes of nails an hour (one every two minutes) to meet that goal. A test requires that you correctly pack five boxes of nails in ten minutes to be hired as a production worker for this company.

A cutting score may be a percentile score.

Example of a percentile cutting score:

Applicants must score at or above the 50th percentile to be invited for an interview.

A cutting score may also be a raw score or a percentage.

Example:

Applicants must correctly answer at least 14 out of 20 questions, or have a score of 70%.

As you can see, there are many different types of scores you can receive. Remember, talk to a counselor or teacher if you need help understanding your assessment scores. The more you know, the better career decisions you will be able to make.

Interpreting Achievement Scores

The most commonly used scores are grade scores, percentile ranks, stanines, and standard scores.

Grade scores

These scores determine how a person's individual score compares to an. educational grade equivalent. In order for an evaluator to further understand what a grade score really means, a test item analysis might be performed to determine what the individual seems to be able to do best^ For⁻ˈ example, John scores at a second grade level. Upon analyzing the items, it is apparent that John is able to count, add and subtract simple math problems. This information gives a more functional meaning to the grade level score.

Percentile Scores and Stanine Scores

These scores are useful in comparing the individual's performance against a standard or group. Evaluators may wish to explain norm groups and what the scores mean for clients who may be interested in understanding that information..

Standard Scores

There are several standard scores used in testing such as T scores and deviation scores. The primary purpose of these scores is to compare results to other tests.