Psychometric & Vocational Assessment Tests

In the words of Plato “No two people are born exactly alike…..”. Therefore the task of a career adviser is complimented by the use of various assessment tools, including Vocational Assessment Instruments.

There are six types of assessment tests:

Intelligence

Interests

Values

Skills

Personality

Computer based

The Education and Industrial Testing Service of San Diego, California has developed three career assessment instruments encapsulating all of the above:

COPS – Career Occupational Preference System, which is an Interest Inventory and takes 20-30 minutes to complete.

CAPS – Career Ability Placement Survey, which is a battery eight 5 minute Ability/Skills assessments.

COPES – Career Orientation Placement & Evaluation Survey, which is a Values Inventory that takes 40-50 minutes to complete.

A notable feature of the COPSystem is that it indicates specific links between users and occupational groups, for each measured dimension – Interests; Abilities; Values

Australian Centre for Educational Research (ACER) has developed a range of tests focused on:

Recruitment and Selection

Personality Indicators

Organisational Development

Career Planning
Harcourt Assessment Australia & New Zealand also produced a number of assessment and career planning tests and support products covering the following topics:

- General Mental Ability
- Emotional Intelligence
- Numeracy, Literacy & Occupational Skills
- Occupational Personality & Motivation
- Workplace counselling
- Vocational Guidance
- Job Analysis & Job Stressors

The value of testing is an ongoing debate, however it is accepted that clients need to be assessed and if used wisely vocational assessment instruments provide valuable information to the adviser.

ACMA uses a multi part written assessment and online psychometric test, as well as personally evaluating each client. This combination has proven to ultimately provide a highly accurate profile that then enables specific advice and direction to be developed.

Formal assessment provides a reasonably accurate vehicle to identify a person’s interests, values and abilities and consequently make informed career choices.

The overall objective of these tests is to assist clients to make more objective and rational career decisions. Accordingly, the central task of narrowing career options is assisted by assessments tests, promoting self knowledge and self development, plus the keys to considering various occupations.

Tests are based on the following factors:

- **Raw score**
  - score a candidate has earned for the number of correct answers
- **Sample population**
  - when comparing an individual with a group, the group are themselves a sample of a larger group called the population
- **Norming**
  - test results for a large group of previous test results (standard set of results) with which to compare current results.
- **Norm group**
  - group on which previous tests were conducted
- **Correlation statistically significant**
-correlation of one statistic to another is the measure of how the two are related (if the relationship is perfects then the coefficient is 1.00 etc.)

Reliability
- extent to which a set of test results are reproduced when the same test is readministered to the same group of people

Content validity
- if the test content is the same as the job for which the test is being administered

Criterion validity
- is purely empirical (you may have no logical reasoning that an ability is needed, you have simply observed the connection)

Construct validity
- based on a logical, theoretical argument (in an ideal world)

Distribution
- the frequency or how often each score occurs

Normal distribution
- bell shaped curve when measuring a wide range of things

Percentile
- position in a large group somewhere between the bottom (or 1st), to the 99th scoring as high or higher that 99%

Standard score
- set of previous results with which to compare results from new group with

Intelligence Tests

Are an important tool to ensure that people are employed in pursuits that match their IQ level. Rex and Margaret Knight wrote in 1959:

“Intelligence tests are employed for many practical purposes. They are of great value to the vocational psychologist, as an aid to determining the type of occupation for which an individual is best fitted. Occupational success, of course, depends on many factors beside intelligence; it depends also on special aptitudes, attainments, physical qualities, interests and character traits. But there are many occupations in which high intelligence is a prerequisite, though not a guarantee of success. A boy of no more than average intelligence who attempts to train for one of the higher professions is wasting his time. Conversely, where a person of high intelligence is employed in routine work, his talents are lost to the community, and he himself may suffer great unhappiness and frustration. In doubtful cases, an intelligence test may save years of misdirected effort.”

It needs to be noted that intelligence and merit are not necessarily related. Adolf Hitler was a highly intelligent, but was a flawed ‘evil genius’, ultimately killing tens of millions. Intelligence is a potent tool for doing either evil or good, just as manual or social skills can be used for constructive of destructive purposes.
Psychologist Cherie Curtis published an article in the Financial Review on 18\textsuperscript{th} April 2005 making the following comments that confirm the value of standardised assessments in the recruitment selection process:

“By including assessments in their recruitment tool kit, employers cast a net wider to include talented people working in different fields or with qualifications or skills outside the usual requirements. Employers are well advised to benchmark their own organisation culture and the predominant values of employees, and then assess candidates against the measures to accurately identify those with a good fit. Appropriate assessment can also be applied to determine a candidate’s cognitive ability …work preference or job fit profiling to assess how well they may work with others.”