



Abilities Assessment? What's That?

By LAZAR EMANUEL



1. What is abilities assessment? Abilities assessment relies on the fact that many of our aptitudes are fixed or hard-wired and are not essentially modified by training or practice. Every parent with two or more children learns quickly that every child is different. Every teacher knows that no two students in her class are exactly alike. Our studies of genealogy have confirmed the validity of testing for innate aptitudes. Several organizations have developed tests of one or several abilities. Most of these are conducted in hands-on clinics in large cities. These require several trips to the clinic. Only the Highlands Company in Larchmont, NY offers the assessment online.

2. How are abilities assessed? Unlike tests of skills, personality, interests or values – all of which are influenced by changes over time – abilities are assessed through the actual performance of manual and mental tasks which measure how easily the test-taker can perform those tasks. Other publishers of ability assessments conduct their assessments on paper or through manual performance. Only Highlands has perfected electronic worksamples testing different natural abilities – all online. The worksamples require the test-taker to follow instructions on the computer screen (reproduced in audio) and then to “do” or “recognize” something in response. In all, the Battery takes three hours to complete.

3. Describe one natural ability. One natural ability is demonstrated by the method which an individual uses to solve problems. A student’s scores on two of our worksamples tell us whether he or she is a diagnostic thinker or an analytical thinker. Analytical thinkers can recognize a logical structure among related ideas. Diagnostic thinkers have an aptitude for recognizing a common relationship among seemingly discrete or unrelated notions or ideas. People with strong analytical ability may turn to fields like engineering, computer programming, accounting-finance, and editing. Diagnostic thinkers are more comfortable as lawyers, doctors, or psychologists.

4. What other abilities does a good assessment measure? The Highlands Ability Battery measures fifteen different abilities, in addition to the two problem-solving abilities. They are:

Idea productivity – the rate at which a person offers ideas; a measure of the quantity of ideas, not their quality;

Spatial Relations Visualization – or Structural Visualization – the ability to perceive objects in three dimensions. This ability is helpful to mechanics and dentists, who work with their hands, but also to architects, astronomers and nuclear physicists, whose work is conceptual.

Observation – the ability to recall objects and changes in a person’s field of vision.

Design memory – the ability to visualize, recall and expand upon a two-dimensional graphic or design; useful in such fields as biology, architecture, fashion, art history, etc.

Verbal memory – the ability to remember material presented in written form and to associate words or terms which relate to each other.

Number memory – the ability to remember non-associated numbers; the student sees and hears multi-digit numbers and is asked to reproduce them; a valuable ability in inventory control, stock trading and retail sales.

Tonal memory – the ability to remember and differentiate between musical tones; “the memory for melodies and harmonies”; a measure of the ability to learn by listening.

Rhythm memory – the ability to perceive and remember rhythmic patterns and actions; relates to the process of learning through movement (kinesthetics).

Pitch discrimination – the ability to perceive and identify minute differences in sounds on a tonal scale; relates to the ability to detect fine differences in taste, touch and the other senses.

Visual speed & accuracy – the speed & accuracy with which one sees and processes numbers, letters, and symbols.

Time frame – measures whether a person prefers to work in short time segments or to focus on long-term projects and more remote goals; entrepreneurs have a long time frame.

Vocabulary – measures the linguistic level at which a person expresses thoughts and concepts to others – a vital predictor of success and performance levels at work.

The Highlands Ability Battery also tests two scales that define personal style. These are factors that control a person's response to other people and the work environment. They are:

The generalist/specialist scale – Generalists are group workers – they have an easy time getting along with other people; Specialists prefer to contribute independently and to develop and own “their own thing;”

The extrovert/introvert scale – Extroverts are essentially gregarious and outgoing and need people to work with and talk to; Introverts are introspective and reserved.

5. Students grow and change over time; do their abilities change as they grow? No, abilities as we define them are stable and develop naturally until the age of 14 or 15. At that point, they remain, essentially unchanged, throughout the rest of life. Skills can be added and studies can be modified, but natural abilities are constant and immutable.

6. What factors are not measured by an abilities assessment? Abilities assessments do not result in grades, and they do not reflect class standing or general intelligence. Abilities assessments are designed, instead, to get at the student's core strengths and to define him or her in terms that guide him to success and happiness in life and career.

7. When should a high school student complete an abilities assessment? Scientists have determined that a child's natural abilities mature and are ready to be tested at any time after the age of fifteen. The sooner after that age your child is tested, the sooner he or she can take advantage of the insights the test provides into good study and learning habits, as well as into the selection of the right college and career.

8. The Highlands Ability Battery sounds complex and the results hard to understand. How do you help my child to know what the results mean? First of all, your child gets a detailed 32-page report which includes a bar chart and a discussion of the test results and their meaning. The Highlands Company has trained and certified more than 225 Affiliates to interpret the report. Many of these Affiliates have qualified as counselors on college admissions. Each Counselor has been assigned a full page on the Highlands Student Center, www.HighlandsStudentCenter.com. The student selects a Counselor, who conducts a two-hour personalized feedback conference.

9. Do the results of an abilities assessment help the student to define the ideal college learning environment? Yes. A college's learning environment is determined by its size, the size of its classes, the ratio of faculty to student, its housing arrangements, the size and scope of its library, its eating arrangements, etc. Most critical is the college's commitment to particular majors, as, for example, to History or Economics, as opposed to the sciences or engineering. The assessment tells you whether your child is a generalist or a specialist, an introvert or an extrovert, as well as how he or she learns best. All of these tell us what college environment will enable the student to prosper and grow.

10. How does abilities assessment help in the choice between a liberal arts college and an engineering school? A student who knows his or her own strengths is miles ahead of a student who doesn't. Several of the abilities measured on the Highlands Ability Battery form patterns which indicate whether a student will be happier in liberal arts or in engineering. An engineer should ideally be strong in Idea Productivity, analytical thinking, spatial visualization, observation and Design Memory. On the other hand, the ideal pre-law student may also be high in Idea Productivity,

but he will probably also score in the higher percentiles in diagnostic thinking, in spatial theory, and in Time Frame. High scores in Vocabulary also suggest success in law practice, as they do for executives and entrepreneurs.

11. What new insights does an ability assessment provide that are not measured by a student's grades or the standardized test scores? Grades and standardized test scores represent a convenient means by which the colleges measure and qualify students. However, they are more representative of skills and level of learning than of true abilities. Educators are not generally pleased that they are limited to these devices. Many of them would prefer a test that separates and identifies students on the basis of their innate abilities. They know that the present concentration on grades is disadvantageous to minorities and the underprivileged. Certainly, the concentration on grades and achievement ignores the role of natural abilities in education. How can we identify the next Mozart or the next Einstein without testing for innate abilities?

12. My child is a good overall student but she feels that she has no special talents. Would an ability assessment help her get a better sense of direction? Yes. Abilities assessment is of special importance to "good overall students" without identifiable "special talents." Why? Because these students know very little about themselves that will help them in college and work. An abilities assessment will go far in telling them how they solve problems, how they learn best, what work environment is right for them, whether they have measurable musical talent, and how they relate to and are perceived by others. The experience of completing the Battery and discussing the results with a College Counselor will do more to impress them with how "special" they are than anything else. Students will be able to describe their strengths to others once they understand them and their significance in study and career.

13. Do you feel that an abilities assessment is an important investment for parents of a college-bound student? Yes. At very little cost relative to the cost of special training for the SAT or ACT, your student will get enormous insight into the courses and career he or she should pursue. We are confident, for example, that we can identify students who will be happy as surgeons and distinguish them from students who will enjoy a career in teaching.

14. My son has a difficult time absorbing knowledge through reading but is an active listener who loves to debate ideas. Will an abilities assessment help him to study and learn? Yes. One of the strengths of the Highlands Ability Battery is that it tests the five prime learning channels – verbal memory, tonal memory, design memory, number memory and rhythm memory. If your son has difficulty learning by reading, he can turn to his strengths as an active listener and debater, and concentrate on learning by listening and reacting to the spoken voice. He can attend lectures and listen to books on tape. In the report of results, we include a chart showing the student's relative strength in all five learning channels. Your son's score in the Tonal Memory worksample should be relatively high.

15. How can I confirm that the results of the Highlands Ability Battery are valid and reliable? Psychometric tests are expected to satisfy the tests of reliability and validity. **Reliability** is the degree to which a test will remain consistent in its results over a period of time. Reliability anticipates that the score for any individual is the 'true' score for that individual, i.e., that the score will be repeated within a narrow range if the individual retakes the test.

Because each of the worksamples composing the Battery tests a different ability, each worksample must satisfy the requirement of reliability independently of the other worksamples. One study of the Battery showed a reliability range for the individual worksamples of .83 to .95. See, Summary of Completed Research, page 8, *Research Proposal, The Highlands Ability Battery*, 1994, C.L. Holland, Ph.D. Also, *A Report on The Statistical Characteristics of the Highlands Ability Battery*, 2002, The Chauncey Group (ETS).

Validity is a measure of the certainty or confidence with which we can ascribe a contextual significance to any score on a test. In simple terms, the test should measure what it claims to measure – in this case, each worksample should measure one of several human abilities. A test of abilities has validity if it demonstrates a strong correlation between test scores and the ability being tested. Each worksample of the Battery must satisfy this test.

Validity can be measured in a variety of ways for tests similar to the *Highlands Ability Battery*. Validity research has been an ongoing function of the Johnson O'Connor Research Foundation, forerunner of the Highlands Battery, for over 50 years and of The Highlands Company since its inception in the early 1990s. Many of the individual components in other assessment tools are similar in construction to related worksamples in the Highlands Battery,

and it is possible to draw parallel validity results by measuring one instrument against another. *See, A Report On The Organization, Function, Reliability & Validity of The Highlands Ability Battery*, 2007, Dr. Thomas N. Tavantzis.

The study of norms conducted in 2002 by the Chauncey group, an ETS affiliate, *supra*, confirmed that the norms assigned by Highlands to scores on the Ability Battery were essentially replicated over 4,307 individual test records. The Battery was the subject of a review in January, 2009, by Professor Manivong Ratts in *A Counselor's Guide to Career Assessment Instruments*, a publication of the National Career Development Association.

16. My child suffers from a low sense of self-esteem. Is there a risk that he will “fail” an abilities assessment?

No, it is impossible to “fail” an abilities assessment. We do not “grade” anything. We simply measure how well the child is able to perform each worksample. Our aim is to identify a child’s strengths. If she does well in diagnostic thinking, for example, she shows the strengths typical of lawyers. If she does well in spatial visualization, she would do well to consider a career in engineering or medicine. The point is that abilities testing is never judgmental. It simply confirms the abilities your child was born with and gives her the confidence to describe them in her college application.

17. How does the Highlands Ability Battery help a teacher or a school’s guidance counselor to write a better recommendation letter? The more we know about a student, the better we are able to help him or her to choose the right college, and the better we’re able to express in our recommendation letters what that student can contribute to the college. If the Battery suggests that the student is both an introvert and a specialist, for example, we would not recommend the University of Michigan. Instead, we would suggest a small college such as Amherst or Reed which would enable the student to concentrate on specialized projects and “shine.”

18. How can we all help to overcome the reluctance of college admissions deans to use abilities assessment in the selection process? This is the most difficult question we have to address. The College Board, which publishes the SAT, is an entrenched institution which has its own interests to protect. Because the SAT has been so widely adopted as the admissions tool of choice, it’s very difficult for admissions counselors to suggest an alternative approach to the admissions process, although people like William Fitzsimmons at Harvard have certainly expressed their displeasure with the overwhelming reliance on the standardized tests. Abilities assessment tests, which have a proven and solid track record of their own, are a viable alternative to standardized tests. As parents learn to support abilities assessment and its values, more educators will turn to it as well.

19. How does abilities assessment help in the years after college? Because abilities assessment measures natural abilities at the age of maturity, they are permanent markers of a person’s strengths and style. That’s why it’s so important for a high school student to complete the Highlands Ability Battery as soon as possible after the age of 15. Once the results are embodied in a report which the student can study and discuss with a Highlands Counselor, they represent a guide to a satisfying life and career. So many college students, assuming that they will go on to the same career as a parent or a personal “hero”, embark on the wrong courses. One student we know chose courses in anatomy because she thought there was glamour and excitement in forensic medicine. At the end of her junior year, she realized that her real love was teaching young children. She took the Highlands Ability Battery and her results confirmed her ability to find fulfillment in teaching. Her results showed that she was a generalist and an extrovert and had strong scores in Classification, Idea Productivity, Verbal Memory and Vocabulary. The Battery enables students to make better choices about college majors and about their careers. Ability Assessment is a tool for life.

20. How does the Highlands Ability Battery compare in cost with other abilities assessments and with prep courses for the SAT or ACT? When you pay for the Battery, you pay for a three-hour assessment comprising tests of seventeen abilities, a 32-page report of results, and a two-hour feedback conference with a Certified Highlands Affiliate. The conference can be conducted either in person or by phone. The price of the Battery is usually considerably less than the cost of in-house assessments conducted in assessment clinics, and even more cost-efficient when compared with the usual SAT or ACT prep courses.

Lazar Emanuel is CEO of the Highlands Company, publisher of the Highlands Ability Battery.
www.highlandsstudentcenter.com