

EVALUATING EVALUATION SYSTEMS
A COMPARISON OF COMPUTE-A-MATCH, APTICOM, AND MESA

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ABSTRACT

Comprehensive vocational evaluation is the gateway to success - from making sound vocational decisions based upon understanding of one's aptitudes and other worker characteristics, to leading productive, satisfying lives through work. It is important that evaluators utilize assessment and placement systems that are comprehensive - systems that will ensure, for the client, accessibility to the full range of work opportunities. In this paper, the presenter urges evaluators to examine closely any assessment system, to analyze the comprehensiveness, before making a selection.

TARGET POPULATION:

Junior/Senior High Students
Vo-Tech Students
Disadvantaged Persons
Persons with Disabilities
Displaced Workers
Injured Workers (Workers Compensation)
At Risk Students
Employers

In this generation of coined phrases, the expression "state of the art" is definitely overworked. What began as a beautiful description of the latest technology, the finest quality, and the leader in its category is now being indiscriminately used to describe everything from the brewing of beer to the manufacture of blue jeans.

Nevertheless, I would like to put a handle on PESCO INTERNATIONAL's assessment system. We call it COMPUTE-A-MATCH, and because of the overuse of the phrase, we hesitate to describe it as "the state of the art." We thought it might be even more accurate to call COMPUTE-A-MATCH "the state of the science."

Because after all, our end of the job is the science of creating the tools to help you do your job best. Your end of the job is the art of using those tools to the best advantage of the people you are helping.

We feel there is in actuality very little to compare COMPUTE-A-MATCH with its very distant cousins Apticom, Mesa, and others.

COMPUTE-A-MATCH provides you with the most complete, most comprehensive testing; the fastest, most accurate computerized scoring; and the fastest, most accurate, most comprehensive matching system currently available.

And that's what it's all about, isn't it? Whether you are buying an assessment system just to comply with the law - the Carl Perkins act or the Youth Employment and Development Act or the Rehabilitation Act - or you are doing it to provide your evaluatees with the advantages of the most up-to-date evaluation and placement technology so they can make sound vocational choices, that's really what it is all about. Testing, scoring, and matching.

I think the best way to clearly show you why we call COMPUTE-A-MATCH "state of the science" is to take you through each of these processes.

Here's how COMPUTE-A-MATCH tests:

COMPUTE-A-MATCH measures an individual against all the factors established by the U.S. Department of Labor in classifying jobs, including all three General Education Development factors of Reasoning, Math, and Language; the eleven vocational aptitudes; vocational interests; temperaments; and work attitudes. Each trait is measured and normed individually, eliminating cross contamination and enabling direct interpretation and isolation of traits by evaluator or client. COMPUTE-A-MATCH measures persons from GED levels one through six and aptitude levels five through one. All tests can be administered non-sequentially, and the taking of one test does not depend on the completion of any other test.

In a direct comparison of COMPUTE-A-MATCH to other systems, listen to what the developers have to say about their systems in their own manuals:

VRI, in its Apticom manual, states, "In keeping with the overall design of Apticom as an integrated system, it was determined "....its range of measurement would extend from GED level 1 to GED level 4. The Apticom aptitude battery has its primary target population among students and clients who are not in or bound for jobs in fields that would require four years of academic college work and more....Since part of the aim of the developers of the educational battery was to make it maximally efficient to administer, the decision was made to trade greater efficiency for the vast majority of users in exchange for added information that would have practical significance for few users." (System Technical Manual, Apticom, p. 45) Actually this would eliminate all jobs requiring levels above 12th grade. This includes all training for jobs in post

secondary and colleges.

In addition, the manual states, "The job titles will be restricted to those for which the examinee's results meet or exceed the established required level of General Educational Development in Math (M) and Language (L)." (Operation, Administration, and Scoring Manual, Apticom, p. 60)

(Remember that COMPUTE-A-MATCH measures not only Math and Language, but Reasoning also - at all GED levels.)

On assessing all the aptitudes, Apticom lists only 10 of the 11 aptitudes as being measured, omitting color discrimination. And although the battery measures Eye-Hand-Foot Coordination, the results are not used, according to the manual, "...as Eye-Hand-Foot Coordination aptitude norms are not associated with OAP's." (Operation, Administration, and Scoring Manual, Apticom, p. 63)

(Remember that COMPUTE-A-MATCH measures all 11 aptitudes - at all Aptitude levels.)

Valpar, developers of Mesa, state in their manual, "Mesa is a screening assessment program. In that respect it is not designed to evaluate the top 10% or the bottom 10% of the population.... Individuals in the lower 10% of the population, therefore, can be expected to have some difficulty completing the exercises successfully." (Manual, Mesa, p. 41a)

Further they state, "There are individuals who may not benefit from such a broad-based screen assessment, the results of which are based on short testing segments in which speed is a factor."

In addition the manual further states, "Spelling, vocabulary, mathematicsare from the fourth grade to the tenth grade+ level. If evaluatees are interested in pursuing specific classes, training, and/or jobs which require skill

levels beyond those measured in these three areas, the evaluator should consider additional evaluation." (Manual, Mesa)

(Remember that COMPUTE-A-MATCH measures individuals at all GED and aptitude levels.)

The federal law regarding nondiscrimination on the basis of handicap states that any entity receiving federal funding "shall assure itself that....When a test is administered to an applicant who has a handicap that impairs sensory, manual, or speaking skills, the test results accurately reflect the applicant's aptitude or achievement level or whatever other factor the test purports to measure, rather than reflecting the applicant's impaired sensory, manual, or speaking skills (except where those skills are the factors that the test purports to measure)...." (Federal Regulation, Title 45)

The Apticom manual cautions, "In those instances involving upper extremity trauma, evaluation personnel should beware that perceptual and cognitive aptitudes estimates may be concomitantly depressed given Apticom's response mode." (Operation, Administration, and Scoring Manual, Apticom, p. 46) The developer's warning about the use of the electronic probe reads as follows: "Make sure the examinee understands that answer selection requires only a light touch with the answer probe and the probe should be withdrawn from the selected answer hole immediately as the light next to the hole is lit. Hard stabbing or pressing may cause damage to the probe over time. Also make sure the examinee understands that double touching with the answer probe, whether intentional or inadvertent, will cancel the select answer. Keeping the probe in the hole too long may have the same effect as double touching." (Operation, Administration, and Scoring Manual, Apticom, p. 46)

The Mesa manual states, "All responses are made with the rotary control. Perceptual, motor, visual, academic, and reasoning skills are tested through a series of tasks which are as attractive and self-motivating as an educational computer game." (Manual, Mesa, p. 4)

In the COMPUTE-A-MATCH manual, we quote the federal law and give guidance to evaluators for administering the tests so there is no discrimination to anyone with a sensory or physical disability.

Your peers, Dr. Karl Botterbusch and Nancy Michael, have made comments in published articles about selecting appropriate assessment systems. They said, "When selecting the tests for the evaluation unit, make every attempt to select tests that cover the entire range - from none to high school and beyond." (Botterbusch and Michael, Testing and Test Modification in Vocational Evaluation, p. 11)

Botterbusch, in another article warned, "While technological answers are very useful in some cases, the evaluator should look for content behind the flash. Does that computer administered test really measure some trait more accurately than a standard test or is it just more attractive?....In conclusion, consider your clients and act as their advocates. The worst possible case to imagine is a class action suit against a state agency or facility for making decisions on the basis of devices poorly normed, having unknown reliability, and unknown validity. What defense could any of us offer?" (Botterbusch, Norms, Reliability and Validity in Commercial Vocational Evaluation Systems: A Critical Review, pp. 30-31)

When it comes to scoring and data entry, PESCO INTERNATIONAL is a leader in the development and use of optically read data cards. COMPUTE-A-MATCH instantly and automatically scores, interprets, and stores data from test and data entry cards. COMPUTE-A-MATCH creates, and

maintains, and stores a record file on each individual. COMPUTE-A-MATCH, through data entry, considers physical and environmental limitations of a person.

On scoring, the Mesa manual states, "The computer analysis of the raw score is very complex. Because of the extensive analysis utilized by the program, the data is not subject to effective, direct interpretation by the evaluator Time, and speed factors are evaluated at each level. . . . The Mesa exercises have been interrelated in determining various scores; consequently, final scores rely on data from all the subtests and any omissions can effect the outcome of those scores and the total effectiveness of the assessment." (Manual, Mesa, p. 75)

When it comes to matching people to training and jobs which will best maximize their vocational potential, COMPUTE-A-MATCH is the most comprehensive matching system currently available. COMPUTE-A-MATCH instantly matches your evaluatees to an actual job or training program. Within minutes, the counselor or evaluator can match single or large numbers of evaluatees to local training programs, actual jobs, and local employers who could potentially employ the person. COMPUTE-A-MATCH performs job searches based upon true transferability of skills. COMPUTE-A-MATCH accesses the entire Dictionary of Occupational Titles with the job descriptions and the crosswalks utilized by the U.S. Department of Labor.

We get calls every day from people who have unfortunately bought other assessment systems. We feel bad about it. But we feel even worse about the evaluatees who at this critical stage in their lives did not receive the kind of aptitude counseling they were entitled to.

Testing. Scoring. Matching. Helping people reach their potential. COMPUTE-A-MATCH. We do it best. We are the "state of the science."

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