Standardized Testing Measurement of Academic Achievement

Standardized Testing Measuring the Academic Success of Students

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How effective are standardized/high stake test at measuring student’s academic performance and providing individualized outcomes based on the contents of how the test are designed?

ABSTRACT

Standardized testing has been a very important issue in education today. Many schools use the testing score to determine whether a child should continue to the next grade level. As we review the methods teachers use to prepare students for these types of test, and the amount of instruction time utilized to cover test materials, and the level of emphasis placed on these test the question of students performance as well as academic success is a rising question. It is importance for educational stakeholders to determine if students are learning the necessary materials needed to prepare them to move into the next grade and if the results from the test used accurately measure students individualized success and academic performance. Another issue that sheds light on the importance of this question is how much of this information is retained by students after the test is over from each year?
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Keywords

Accountability – Responsible for giving an account (as of one’s act) capable of being accounted for: EXPLAINABLE

Standardized test-is a test administered and scored in a standard manner. The tests are designed in such a way that the "questions, conditions for administering, scoring procedures, and interpretations are consistent" and are "administered and scored in a predetermined, standard manner."

Evaluations – to examine and judge the quality or degree of

Statistics- a branch of mathematics dealing with the collection, analysis, interpretation, and presentation of masses of numerical data.

Bias-prejudice
High Stake Testing

A. Types of High Stake Test
   1. Norm-referenced test
   2. Standardized test
   3. Criterion reference test

B. Statistical Factors
   1. Economical issues
   2. Teaching/learning styles
   3. Content of material
   4. Students performances

C. Evaluation tools
   1. Scoring machines for test
   2. Portfolio
   3. Projects
   4. Exams

D. Conclusion
The purpose of tests is to provide educators, students, parents, and policy makers with information that is valid, fair and reliable. Standardized tests provide information that helps support four critically important tasks for educators and the public. (Standardized assessment 2000). First tests are to identify the instructional needs of individual students so educators can respond with effective, targeted teaching and appropriate instructional materials, secondly judge students’ proficiency in essential basic skill and challenging standards and measure their educational growth over a period of time, thirdly evaluate effectiveness of educational programs and finally monitor school for educational accountability including under the no child left behind act. How valid are test scores are predictors of grades? Do they have any validity as predictors of actual accomplishment? Are the tests biased against certain members of society? How effective are standardized /high stake test at measuring student’s academic performance and providing individualized outcomes based on the contents of how the test are designed? This paper will review extensive critical literature on the subject of standardized tests in an attempt to answer the question mentioned.

A standardized achievement test is simply a test that is developed using standard procedures and is administered and scored in a consistent manner for all test takers. (Standardized assessment, 2000). There are many different types of standardized test administered in the public school system all across the country. Intelligence tests are standardized tests that aim to determine how a person can handle problem solving using higher level cognitive thinking. Often just called an IQ test for common use, a typical IQ test asks problems involving pattern recognition and logical reasoning. It then takes into account the time needed and how many questions the person completes correctly, with penalties for guessing.
Standardized testing in schools for academic progress and intelligence are not the same, although they use similar questions and methodologies. Academic progress tests such as the Iowa Basic Skills Test give schools an idea of how their students perform on a national level in core areas and how well the school has taught certain subjects. While intelligence tests are often used for gifted and talented programs, academic progress tests usually identify poor performance among students and the effectiveness of teaching. **ACT** is a college admission test designed to assess students’ general high school educational development and their ability to complete college-level work. **PSAT** is a preliminary version of the **SAT**. Sophomores starting early and juniors who want extended preparation for the **SAT** should prepare for this. Taking this would raise your **SAT** scores. This also helps you to get to National Merit Scholarship and other awards. **SAT** (Scholastic Aptitude Test) is a three-hour exam measuring a high school student’s academic success in the first year of college. Some colleges consider **SAT** scores major factors in their admission process. (Helms, 2009).

Research has provided educators with a vast amount of information about the standardized tests. Standardized testing has received criticism from psychologists, educators and parents. (Shepard & Bliem, 1995). Criticism of academic testing often focuses on linguistic biases against minorities, the testing methods that may not work for all types of students and negative reinforcement of lower performing students. Research in the field of cognitive psychology provides some intriguing suggestions. Some researchers in cognitive psychology have divided the thinking process into at least two levels: a surface level concerned mostly with retrieving information, and a deep cognitive level involving the synthesis and analysis of a
variety of sources of information in order to interpret that information, solve a complicated problem, or create something new. A 1994 study that examined the thinking styles of 530 students and their performance on the SAT suggests that standardized tests may penalize students that tend to favor deeper approaches to problem solving. (Shepard & Bliem, 1995).

It has been discovered that the group who scored highest on the SAT tended to use more superficial thinking strategies than those who scored in the low and moderate ranges. Also, the lowest-scoring students employed the deep approach more often than the higher scoring students. Of course some of the high scoring individuals may be extraordinarily capable, as they may possess some of the important qualities the tests fail to detect. But these studies strongly suggest that standardized tests fail to measure the qualities that are truly important, reward the ability to adopt a superficial style of thinking, and may in fact penalize many of the candidates with the deepest minds. Media reports are rife with claims that students in the United States are over tested and that they and their education are suffering as result. Standardized tests are not an accurate reflection of historical knowledge because they can only measure factual mastery and because they are designed to rank students according to the bell curve. (Carter, 2010).

To evaluate pupil achievement, external procedures may be used. The external procedures stress those who write test items and pilot study them, prior to use in testing public school pupils. These kinds of tests pertain to standardized and criterion referenced tests, written and developed by those outside the local classroom and unfamiliar with the children being taught. In a democracy, pupils with teacher assistance need to be involved in decision making. A
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somewhat, recent approach to evaluating pupil achievement involves the portfolio approach. Portfolios are developed within the pupil’s classroom and with local teacher help. External personnel such as from the state department of education, state selected subject matter specialists, as well as professional measurement and evaluation specialists are not involved in portfolio development. (Edgier, 2000). When thinking about measuring the success of students one must hold the individual student in mind. There are opposing philosophies in terms of how pupils should be evaluated. The testing and measuring movement advocates the use of external subject matter and measurement specialists being in charge of developing tests, be they norm referenced standardized tests or criterion referenced devices. The developers are not involved in the classroom where teaching and learning actually occur. (Edgier, 2000). Freud’s national education theory is based on the belief that children have individual differences in development. He asserted that it was impossible the same educational procedures could be equally good for all children. For education the broad significance of Freud’s work was to direct attention to the affective dimension of human behavior. Like Freud the American educational theory of Benjamin Rush, Robert Coram, and Samuel Smith all raised the question about the type of education appropriate to the politics and society of the new republic. Hierarchical evaluation procedures emphasize a top down approach in making decisions on evaluating pupil achievement. State departments of education who appoints and supervises the determination of objectives and test items in criterion referenced tests (CRTs) is an example. Personnel appointed by the state department of education should be known for their knowledge and capabilities in
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writing the objectives and appraisal procedures. Setting standards is a judgmental process involving arbitrary, but not capricious decisions of what is considered good enough. It is essential in high stake decisive assessments that both the decisions and process are fair. (Pell & Roberts, 2006). High stake standardized test are designed in a format that generates only one answer as correct. Students are different in according to many different factors, social economical status, ethnical background history, developmental ability and etc. These test are not designed to meet the individual difference of students and do not have accommodations geared to their specific learning styles. As a result many students have disadvantages that hinder them from effectively being evaluated. NO single test can accomplish all the goals and objectives of the diverse educational system. It is important both legally and technically not to put all the weight on a single test when making important decision about student’s success and school. (Standardized Assessment, 2000).

In my conclusion it is safe to state that high stake test measure student’s outcome according to the responses provided on their test and the scores identify the student’s according to those outcomes: however these tests cannot effectively measure the academic success of students.
References:


