

ENSURING FAIR TESTING PRACTICES

The Responsibilities of Test Sponsors, Test Developers, Test Administrators, and Test Takers in Ensuring Fair Testing Practices

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Abstract

The focus of tests today oftentimes centers on ways to provide good quality tests to test takers in a cost-effective manner. Test sponsors are concerned about the policy issues related to test use; test developers must prepare a test that meets both the purpose and specifications articulated by the test sponsor and the technical standards for quality tests. Test administrators are responsible for test delivery in ways that protect the integrity of the test scores and the security of the test product. Test takers often have limited options in when, how, or why they are taking the test, and may feel victimized in the process. The purpose of this paper is to focus on the test taker and to consider how all parties in the test process (test sponsor, test developer, test administrator, and test taker) have a role to play in ensuring fair testing practices and valid test results.

The Responsibilities of Test Sponsors, Test Developers, Test Administrators, and Test Takers in Ensuring Fair Testing Practices

The focus of tests and testing practices often centers on ways to provide good quality tests to test takers in a cost-effective manner, through the combined efforts of the test sponsor, test developer, and test administrator. Although this is a worthy goal, it is possible that the ultimate interests of the test taker may not be carefully considered in the steps undertaken by these key stakeholder groups. In particular, test sponsors are concerned about the policy issues related to test use; test developers must prepare a test that meets both the purpose and specifications articulated by the test sponsor and the requirements for sound measurement practices. Test administrators are responsible for test delivery in ways that protect the integrity of the test scores and the security of the test product. Test takers often have limited options in when, how, or why they are taking the test, and may feel victimized in the process. The purpose of this paper is to focus on the test taker and to consider how all parties in the test process (test sponsor, test developer, test administrator, and test taker) have a role to play in ensuring fair testing practices and valid test results.

We have purposely sequenced our discussion as follows: considering the roles of the test sponsor first, followed by the involvement of test developers, then administrators, and considering the role of the test taker last. We chose this order because it follows the natural sequence in test design and delivery: from policy, to development, to delivery to the test taker. Sources of information that were used in formulating this discussion include the *Rights and Responsibilities of Test Takers: Guidelines and Expectations* (Joint Committee on Testing Practices [JCTP], 2000); *Standards for Educational and Psychological Testing* (American Educational Research Association [AERA], American Psychological Association [APA], National Council on Measurement in Education [NCME], 1999); *Guidelines for Computerized-Adaptive Test Development and Use in Education* (ACE, 1995); and the *Code of Fair Testing Practices in Education*¹ (JCTP, 1988).

Test Sponsors' Responsibilities in Ensuring Fair Testing Practices for Test Takers

There are a variety of ways that test sponsors can ensure fair testing practices for the test taker in the test sponsor's policy-related decisions. These include test sponsor's decisions relating to communications with potential test takers, their business decisions, preparation of descriptive information about the testing program and the purposes of the test, their test administration decisions, guidelines they provide on test interpretation, and how they help to ensure the confidentiality of individual test-taker results.

Communicate with potential test takers. Test takers need information about how to register to take the test and descriptive information about the general content of the test. In making decisions about how to conduct this communication, a responsible test sponsor will consider (a) cost, (b) ease of access, (c) efficiency for the test taker (e.g., providing one number to call to obtain information and complete the registration), and (d) prompt responses to inquiries from potential test takers.

¹ A revised *Code of Fair Testing Practices* will be released in late 2002.

Make sound business decisions. The most important business decision for the test sponsor related to the test is what test development process to use. Oftentimes this will require the RFP process and consideration of competing proposals from test developers. Although the bottom line is always a critical consideration in these business decisions, the capacity of the test sponsor to deliver a quality product should be the foremost consideration. Cost may not be the best criterion to use because cutting corners during test development is often related to poor test development outcomes. If the test sponsor has inadequate technical expertise, the sponsor should seriously consider hiring consultants to evaluate the capacity of competing test developers and oversee the successful bidder's work. Similar decision processes should be used for the test delivery contract.

Preparation of test information materials. It is the test sponsor's responsibility to provide information to the test taker important for preparing to take the test. This information includes the purpose of the test, how the scores will be used and reported, and the kinds of tasks and test formats that are included on the test. For computer-administered tests, test takers should be informed in these advance materials about implications for their test-taking strategy due to the computer delivery (including whether they will be allowed to skip and or review their answers). Test takers should be informed about what materials, if any, they will be allowed to use during the test administration. Finally, these descriptive materials about the test and the testing program should inform the test taker about policies related to score invalidation and retest rules. The test taker should know, for example, if they will be able to "bank" the parts of the test they pass and will only need to retake the parts on which they were not successful during a previous administration.

Make appropriate administrative decisions. The test sponsor should clearly communicate to the test taker the steps and deadlines for test registration and what identification they will need to bring for admission to the testing site. The test taker should know in advance what fees they will be expected to pay and when. The test taker needs to know compliance policies of the test sponsor for late arrival or early dismissal. It is important when making decisions about test administration that the venue is conducive to good test-taking practices, including the absence of distractions and sufficient space for any materials the test taker may need to access.

Prepare interpretive guidance. Test takers have a right to know what the passing score is for the test and general information about how the passing score was determined. They also need to know if they have any due process rights to score challenges, including what costs are associated with regrades or second opinions. It is important that the test sponsor manage this process so that the test taker receives prompt responses to their questions and inquiries.

Protect security and confidentiality. Although the test administrator and test developer also have a role to play in ensuring confidentiality, the test sponsor must guarantee that the transfer of individual data records and their storage meet necessary requirements for confidentiality of individual test-taker results. In addition to policies and procedures to protect the confidentiality of individual test-taker information, the agency must also consider policies to ensure test security. This includes test sponsor's policies on test takers' legitimate access to review their test results. Reasonable actions should be taken to safeguard test integrity.

Test Developers' Responsibilities in Representing the Test Taker

Test takers have the right to tests that meet contemporary professional standards relating to technical quality and fairness (AERA et al. 1999; ATP, 2000; PES, 1995). In collaboration with the test sponsor, test developers are responsible for providing test takers with clear and concise information on the intended purpose of the examination, the proposed uses and interpretations of test scores, and sample test content including a representative set of items and questions. Test developers meet these obligations by constructing quality examinations, reporting information supporting test score use, preparing test taker and test administrator materials, and modifying published examinations to maintain their currency and relevance.

Define intended purpose of test. The initial step in constructing an examination is to delineate the assessment objective. This process can be guided by theory or an analysis of content or job functions, and it includes a description of the test content and constructs to be measured. Once established, the purpose of the examination provides a foundation for subsequent test construction, and scoring and evaluation activities. The goals of the examination should be provided to test takers to inform their decisions regarding test participation and preparation.

Build quality tests. Test developers have a primary responsibility to construct examinations that meet current professional technical standards and guidelines (cf., AERA et al. 1999; ATP, 2000; PES, 1995). The test development process is guided by test specifications that describe the format and structure of items, intended test-taker responses, and scoring procedures. It is the test developer's role to ensure that the format and content of the examination support the stated purpose of the examination. For example, the exclusive use of multiple-choice items on an examination designed to assess oral communication skills would violate this obligation.

A key component in the test development process involves the review of test content by qualified experts. A field test of the examination to a representative sample of individuals from the target test-taker population is another important element in test preparation. Documentation of major test-assembly activities should be made available to test takers to facilitate an evaluation of test quality.

Test developers have a major obligation to minimize "construct-irrelevant test variance" (Messick, 1989). Construct-irrelevant test variance reduces the effectiveness of the examination in assessing the construct of interest and distorts the interpretation of test scores. This distortion may either deflate or enhance test-taker performance. For example, test items on an arithmetic computation test that require a high degree of reading comprehension skill may decrease test-taker scores. On the other hand, clues based on the length and structure of multiple-choice item responses that assist test takers to select the correct answer without possessing the target knowledge or skill may inflate test scores. Careful editing of test content, adequate testing time, and the use of standardized testing procedures diminish construct-irrelevant test variance and yield more accurate test scores.

Report findings supporting test score use. Test publishers are responsible for providing confirmatory evidence of the reliability of scores and the validity of inferences based on interpretations of test performance. Test takers and other key stakeholders (e.g., employers, admissions officers, counselors) use this information to make a reasoned judgment of the quality of the examination and its intended purpose and limitations.

Documentation made available by test developers typically describes the nature of the test and its purpose, the test development and scoring processes, validity and reliability evidence, and guidelines for score interpretation (AERA et al. 1999). Messick (1989) and Kane (2001) provide excellent summaries of contemporary procedures for the conduct and reporting of validity studies, and Feldt and Brennan (1989) and Brennan (2001) present similar guidance for reliability studies. Examples of appropriate test score interpretations and illustrations of improper test score use aid test takers and others in understanding the nature and meaning of score data.

Publish test administration and score use guidelines. Test developers promote fair testing practices for test takers by establishing standardized testing and scoring procedures, and communicating these procedures to test sponsors, administrators, and test takers. Administration guidelines should include enough detail to permit others to replicate the conditions under which validity, reliability, and normative data were collected (AERA et al. 1999). Test administration information made available to test takers typically includes a summary of the test directions, testing time allowances, and policies covering the use of adjunct aids such as calculators and reference materials. Testing instructions are often supplemented with practice exercises for test takers prior to the operational testing period as a means of reducing construct-irrelevant test variance. The impact of test-taking strategies and test-taker guessing behavior on test scores should be made known to test takers as a means of increasing measurement fidelity of the intended construct.

The methods used to score, scale, and equate test results, and the procedures in place for establishing passing scores and norms, if applicable to the testing program, should be clearly and concisely communicated to test takers. Illustrations and examples of score reports should be provided as a means of promoting appropriate score use and interpretation.

Review and modify published tests. In some testing situations, the administration procedures recommended by test developers are modified to accommodate the special needs of test takers with disabling conditions. In other circumstances, the test administration procedures may be adapted to meet an emergent condition (e.g., answering in a test booklet instead of completing an answer sheet). Where feasible, the test developer should inform test takers and test administrators of the comparability of scores obtained under different test administration conditions.

Common test modifications designed for individuals with disabilities should be anticipated, where feasible, during the test development process. These include modifying test presentation format, response format, timing, and test setting (AERA et al. 1999). These modifications should be clearly described in an accompanying technical manual, along with the rationale for the modification and any limitations that use of the modified assessment would have on the inferences that may be drawn from test results.

Test developers are responsible for evaluating the effects of changes in the content areas or constructs assessed by the examination, and modifying the examination, as necessary, to maintain the validity of score interpretations. The mere passage of time may not be a sufficient cause for withdrawing or amending a test. However, item exposure and curriculum changes are factors that may reduce the validity of test scores, and it is the test developer's obligation to monitor the effects of these and other factors on the quality of the examination.

Scheduled test evaluation and revision activities can effectively maintain the currency and relevance of test content, and minimize the impact of item exposure. The administration of multiple forms of an examination with minimal overlap among versions of the test is another effective means of maintaining the validity of test score inferences. The distribution of sample tests to test takers, trainers, and educators for little or no fee assists in this effort by eliminating the incentive of retaining actual items or questions from current examination forms.

Test Administrators' Roles and Responsibilities in Representing the Test Taker

Requirements for a standardized test administration include maintaining a consistent testing environment and delivering the test according to rules and policies established by the test developer (AERA et al. 1999). One outcome of a standardized test administration is comparable testing conditions for all test takers. Standardized testing promotes the accurate measurement of the construct of interest by reducing the impact of irrelevant variance. Test administrators promote the rights and interests of test takers by treating test takers with dignity and respect, following published administration and scoring guidelines, providing a suitable testing environment, protecting test security and test-taker confidentiality, and reporting test administration events that will impact the validity of scores.

Treat test takers with dignity and respect. The administration of a test to an individual or a group of individuals is a potentially stressful event. The examination outcomes are of significant consequence to test takers and it is common for test takers to be anxious during the test administration period.

Testing staff can allay anxiety and reduce stress by establishing and maintaining a rapport with test takers throughout the testing session. Meeting test-taker information needs on the administration process and scoring procedures creates a climate of trust and mutual respect. Addressing particular test-taker sensitivities and concerns while maintaining standardized testing procedures (e.g., monitoring and adjusting room temperature and lighting) also improves the quality of the testing experience.

Follow administration and scoring guidelines. Standardized testing requires adherence to testing and scoring directions. It is the test administrator's responsibility to learn the test administration and scoring procedures in advance of the testing session. Becoming familiar with the examination manual of instructions is an essential element of preparing to administer or score a test, and this manual should be made available to all individuals who will play a role in the testing and scoring process. Testing programs undergo periodic revisions, and it is important for testing staff to review testing and scoring directions prior to the testing session to determine changes in procedures.

For paper-and-pencil tests, the pre-administration procedures include verifying the integrity of materials prior to the test date and maintaining their security and confidentiality. Computer-based tests also include a pre-administration sequence of activities on the part of testing staff. Careful attention to pre-administration protocols improves the quality of the testing experience and promotes standardized testing.

Examination manuals of instructions contain specific directions for managing common deviations (e.g., power outages, fire alarms) in testing procedures. Testing protocols cannot anticipate all potential testing irregularities. Testing staff should contact representatives from the test sponsor during the test administration period to seek

guidance on those emergent situations that are not adequately addressed in the manual. At minimum, the testing anomalies should be documented and communicated to the test sponsor.

Provide a suitable testing environment. The testing location should provide reasonable comfort with minimal disturbances to test takers. Lighting, room temperature, ventilation, test site security, and workspace should be configured to meet the requirements of the examination. The test site should be easily accessible to all test takers.

The testing session should be actively monitored by testing staff to maintain the security of the test materials, eliminate collaboration among test takers and the use of unauthorized aids, and provide assistance to test takers. Test takers should be able to access testing staff at any point in the testing period.

Discourage cheating and minimize testing irregularities. Test administration personnel play a primary role in maintaining the integrity of the testing session by implementing procedures to prevent cheating and other unauthorized test-taker behaviors. These procedures include verifying the identity of test takers, preparing a seating chart and randomly assigning test takers to seats/work stations, actively monitoring the test room, eliminating access to telecommunication devices and other unauthorized resources (e.g., calculators, cameras), and maintaining custody of secure materials.

The consequences of violating testing procedures and policies should be communicated to test takers prior to the testing session. Test takers are often required to affirm their assent to these policies prior to gaining access to the examination. Security measures should be explained to test takers as a means of deterrence and to notify them of obtrusive and unobtrusive detection techniques (e.g., videotape, statistical analysis of responses).

Testing irregularities and instances of test taker misbehavior should be documented and communicated to the test sponsor. Test takers involved in on-site irregularities should be advised of their due-process rights relating to subsequent actions that might be initiated by the test sponsor.

Protect test security and test-taker confidentiality. Test administrators have an obligation to preserve the integrity of the examination by preventing unauthorized access and reporting breaches in test security. The validity of score inferences for many examinations rests on the assumption that test takers do not have advance knowledge of specific test content. Testing staff promote this goal by ensuring that test materials are not disclosed prior to or after the testing session.

Test takers have the right to have examination scores kept confidential. Test administrators assist in this effort by ensuring that test results are safeguarded and released only with the consent of test takers. In the event that the privacy of test results is violated, test takers and test sponsors should be immediately informed.

Notify test sponsor and test takers of unusual testing conditions. Test administration events that deviate from the established protocol and affect the validity of score interpretations should be documented and provided to the test sponsor and test takers. Options relating to the use of test scores obtained from nonstandard testing procedures should be explained to test takers.

Test Takers' Role and Responsibilities in Ensuring Fair Testing Practices

As the consumer of the products and services resulting from the decisions and practices of the test sponsor, test developer, and test administrator, test takers sometimes feel that they have few responsibilities to protect themselves in the testing process. More test takers are cognizant of the responsibilities of the test sponsor, test developer, and test administrators than they are of their own role and responsibilities in ensuring fair testing practices and valid test results for themselves. Among the roles and responsibilities of the test taker are: to be fully informed about the test and the testing process, to ask questions if needed information is not available, and to pay attention to the advance materials prepared by the test sponsor, test developer, and test administrator. In addition, test takers have the responsibility to behave in a forthright manner when indicating their knowledge and skills on the test, to know the consequences for their actions (including cheating), to inform the test sponsor of any special conditions that might be needed in order for them to fully indicate their knowledge and skills on the test, and to advise the test sponsor of testing circumstances that may invalidate test results.

Be informed. Test takers have the responsibility to know their rights and responsibilities. They should seek the information they need to make informed decisions about if and when to take the test. Test takers should learn about test conditions and program deadlines.

Ask questions. If the information the test taker needs is not available in resources about the test, then it is their responsibility to ask questions to learn the needed information. Questions asked if the information is not available in test resources include: Why is this test being given? How will the test be administered? What will I be asked to do on the test? How will the results be used? As noted previously in this discussion, answers to these questions should be available through the test sponsor documentation, but if test takers cannot locate this information, they should seek this information from the test sponsor. Without this information, the test taker will not be well prepared to perform optimally on the test.

Pay attention to advance materials. Test sponsors have the responsibility to provide the test taker with advance materials specifying critically important information. However, if the test taker does not follow through with the responsibility of obtaining and attending to the advance materials, these materials serve little purpose in helping the test taker prepare for the test. Test takers must also follow registration rules and timelines. Many test sponsors or their test development contractors prepare practice and preparatory materials. Test takers are neither fully prepared nor fulfilling their responsibilities as informed test takers if they do not take advantage of these preparatory materials.

Be prepared. It is the test-takers' responsibility to know of any fees that need to be paid and when. Test takers should be on time for test administration and know the consequences of late arrival. If the location of the testing center is not well known to the test taker, it is their responsibility to obtain directions. The test taker should know what materials are allowed in the test administration and bring all needed materials and personal identification.

Be forthright. Test takers have the responsibility to follow stated directions and to represent themselves honestly in their test performance. Test takers should know the consequences for cheating or violation of test security.

Know consequences. Test takers are not behaving responsibly if they do not know or seek information regarding consequences for failure to comply with the test sponsor's rules and regulations. Ignorance of this information can only hurt the test taker if challenges are made. This includes knowledge of the consequences for failure to take the test.

Inform of special conditions. It is a right of the test taker to have the opportunity to fully represent their knowledge and skills on the test. In some cases, this may require an accommodation in the test administration policies (e.g., allowing for additional time or private testing environment). The test taker has the responsibility to inform the test sponsor of these needs well in advance of the administration so the test sponsor has adequate time to alert the test administrator to these special conditions. Test takers who ask for special test conditions should also inquire about the test sponsor's policy regarding reporting of test results achieved under special administration conditions.

Ensuring Fair Testing Practices and Valid Test Results for the Test Taker

It is our position that to ensure fair testing practices and valid test results, a partnership must be formed between the test sponsor, test developer, test administrator, and test taker. Test sponsors have the responsibility to provide sufficient information to enable test takers to fairly demonstrate their competence. The test developer is responsible for developing a test that provides valid and reliable evidence of test-takers' knowledge and skills. It is the responsibility of the test administrator to provide a testing environment that enables test takers to competently demonstrate their knowledge and skills. Finally, test takers have the obligation to be adequately prepared, to faithfully respond to the test questions, and to provide necessary information to the test sponsor. Through this partnership, test sponsors, test developers, test administrators, and test takers can help to ensure that test scores are a fair and accurate representation of the test taker's knowledge and skills.

Notes

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