

Integrity and Security in PTE Academic

Introduction

PTE Academic is a computer-based English language test that measures the English language proficiency of non-native English speakers. As the worldwide global leader in publishing and assessment for education, Pearson has combined the power of international test development, in-depth research and proven, proprietary automated scoring technologies to develop the test. Globalization has resulted in a huge increase in English language learners and, in such an environment, test integrity and security are vital. With rigorous measures in place, Pearson provides the assurance that institutions need with regard to knowing the identity of PTE Academic test takers.

Both test integrity and security have been amongst Pearson's highest priorities when developing PTE Academic. They are integral to all aspects of the program, from test development to delivery. In addition, physical security at testing centers, particularly in terms of test takers' identification, is of paramount importance when developing a high-quality test.

PTE Academic is delivered through Pearson's global network of test centers. Pearson is the global leader in electronic testing for regulatory and certification boards, providing a full suite of services, from test development to test delivery to data management. Pearson is committed to providing the most secure environment for the testing business of its clients, including the Graduate Management Admission Council® (GMAC®), the National Council of State Boards of Nursing (NCSBN) and the Driving Standards Agency (DSA). PTE Academic's advanced, highly reliable technology allows it to consistently meet any client's delivery needs.

Test integrity is the quality that gives users of a test confidence that the results they receive are genuine and represent a true depiction of the ability of the test taker in question.

Test security is focused on protecting the confidentiality of test content and ensuring that tests are administered in such a way that test takers are not able to gain an unfair advantage through cheating.

Designed and built to be secure

PTE Academic test items are written by test development professionals in several countries including the United States, United Kingdom and Australia to ensure that items are unbiased and representative of international English. All test items undergo multiple review stages, which include the scrutiny of their content and presentation, ensuring that all items have a high degree of integrity and validity to enable consistent test results.

Key stages in the development of PTE Academic items

Creation	The item is written by an item writer who may be in the United Kingdom, the United States, or Australia.
Peer review 1	The item is reviewed by another item writer in a different country.
Content review	The Language Testing team review the content of the item to ensure that it meets requirements.
Editorial review	The Language Testing development team review the item to ensure spelling and grammar are correct.
Sign-off	Final sign-off of the item within the Language Testing test development team (both content and presentation).
Item bank lockdown	The item is baselined within the item database and is put in to live test forms to be field tested. The items are also field tested by groups of native English speakers for comparison.
Post field test review	Once the item has been sufficiently exposed as a seed item, the responses are analyzed and a psychometric review is conducted.
Live	If approved, the item becomes live and can be used in live test forms. Once a certain number of exposures has been reached, the item can be retired.

The item banking software used for PTE Academic is CERTS, a secure platform that stores all information relevant to every item in the bank. The CERTS software is managed by Pearson VUE, and PTE Academic items are managed by dedicated CERTS managers.

Strict rules are enforced in terms of:

- user access,
- workflow from first submission to live status of items,
- item information audit trails.

If it is discovered that the integrity of a PTE Academic test item or test form has been compromised, for example in the unlikely event of it being published on a website or being made known to a set of test takers, it is immediately removed from the live bank to prevent anyone from gaining unfair advantage based on prior knowledge. In addition, there are procedures in place to investigate and resolve any breach that may occur.

Prior to a test taker's appointment, the files and data required to admit the test taker and deliver the test are automatically downloaded to the test center software from the Pearson hub. This is done via a protected communications link and stored securely on the test center file server for subsequent access by the admissions and test delivery software. Security is also an integral part of the design and build of PTE Academic. For example, multiple test forms are distributed during any given test, making it highly unlikely that more than one test taker in the same room is using the same test form. Pearson's systems generate randomized test forms meaning that test takers in the same test room are taking different forms of the test. This also significantly reduces attempts to predict sequencing.

Test taker and test data security

Test security is the key to maintaining the integrity of PTE Academic. PTE Academic will be administered using new technologies to ensure maximum security of the test itself and verify the identity of the test taker. When test takers register and book to take PTE Academic, they are asked to provide personal information including contact details and educational background. When they arrive at a Pearson VUE test center on the day of the test, test takers must adhere to a strict identification policy that requires valid (non-expired) government-issued identification to be presented. The identification must contain their name, signature, a recent photograph, and date of birth in Roman characters. In many countries, the only piece of identification that will satisfy these requirements is a passport. A test administrator verifies that the test taker's identification is one of the allowed forms of identification, appears to be a genuine document, and is not out of date. The name, date of birth, signature, and photo are then compared with the corresponding data on file for the test taker; otherwise the individual is not allowed to test.

Pearson test centers are equipped with the most sophisticated identity verification capabilities used in the testing industry today. Test takers are asked to provide a digital signature and have their photograph taken, after which their palm vein pattern is captured and verified using state-of-the-art PalmSecure™ biometric technology. Advanced biometric matching is performed to verify test taker identity upon entry to and exit from the testing room (including breaks), to re-verify identity subsequently when tests are retaken, and also to detect test takers attempting to create multiple records or use an impersonator.

PTE Academic also includes a Personal Introduction, giving test takers an opportunity to record a short statement about themselves, which can also be used by institutions as an additional identification verification.

Pearson test center security

To provide a high level of security for all clients, Pearson adheres to strict rules governing the physical security of its test centers, which includes:

- limiting the number of people who have access to the test center,
- restricting access to the testing rooms and server rooms within the test centers,
- biometric verification for test taker access into and out of the testing room,
- motion detection alarm systems,
- remote monitoring of the test center servers.

The design and layout of the centers also contributes to test security:

- Test takers are monitored by dedicated proctors seated in a patented proctor station with a direct line of sight to each workstation;
- Digital audio and video surveillance and recording of each individual testing workstation, to the extent permitted by local law;
- The testing rooms are arranged so that test takers cannot see each others' workstations, and those checking in cannot see into the testing room.

All test center staff undergo extensive training on physical security, data protection, and computer security. In addition, every computer that is used to deliver PTE Academic tests uses a system called 'Delivery Manager.' Delivery Manager locks the workstation desktop to prevent all activity except taking the test. The workstation can only run the test at that time and short cut functions are disabled, so a test taker cannot attempt to download information or screen shots. The test delivery workstation computer is secured by Delivery Manager both before and during test delivery.

Test takers are provided with information about the policies and procedures they must adhere to on test day via the PTE Academic Test Taker Handbook. They are also required to agree to the terms and conditions detailed in the handbook when they register to take the test. No personal belongings are allowed into the testing rooms. Test takers are provided with secure lockers to store their personal items.

Reliability of PTE Academic scoring

Research supports the assertion that, in many ways, automated scoring gives more analytical and objective results than human scoring does. Unlike human judgment, which is prone to be influenced by a variety of factors, an automated scoring system is impartial. Automated scoring also allows individual features of a language sample (spoken or written) to be analyzed independently, so that weakness in one area of language does not affect the scoring of other areas.

Research shows that the automated scoring technology underlying PTE Academic produces scores comparable with those obtained from careful human experts who are trained to consider only relevant language skills. This means that the automated system acts like a human rater when assessing test takers' language skills, but does so with the precision, consistency, and objectivity of a machine.

In addition, the impartiality of automated scoring means that test takers can be confident that they are being judged solely on their language performance, and stakeholders can be confident that a test taker would have earned the same score wherever in the world the test had been administered.

Integrity of results

Both test takers and recognizing institutions have secure login credentials to enable them to access score data from a secure score verification website. To avoid the potential for forgery inherent in issuing hard-copy results, only PTE Academic scores viewed online are guaranteed to be authentic. The photo captured by Pearson on the test day appears on the score report, meaning that there is no doubt over the identity of the person who took the test.

Conclusion

Developed by a team of highly qualified experts, integrity and security are achieved through:

- adhering to rigorous procedures in the design and development of test content;
- continuously replenishing questions and randomizing test forms to minimize item exposure;
- verifying the identity of the test taker using stringent security measures and state-of-the-art biometrics, implemented within the global Pearson VUE test center network;
- implementing strict procedures to ensure physical security within Pearson VUE test centers;
- using automated scoring technologies to ensure precision, consistency, and objectivity;
- allowing access to scores via secure online score verification websites removing the possibility of forged score reports.

In this way, test takers and institutions recognizing PTE Academic as a measure of academic English language competency can be assured that test security and integrity are robust.

For further information about PTE Academic visit www.pearsonpte.com or email PLTsupport@pearson.com.