



Technical
DIGEST

FOR THE ACADEMIC YEAR 2015–2016

APPENDIX A

QUALITY CONTROL SYSTEM (QCS)

Quality Control System (QCS)

Prior to reporting test results, an extensive and comprehensive process called the Quality Control System (QCS) is enacted by the Texas Education Agency (TEA) to verify the quality and accuracy of final reports for Texas assessments. Each step in the QCS process is summarized below.

1. Prepare a test design for each test administration. A test design, in the QCS context, is a set of specific instructions for preparing fictitious student answer documents that are used as test cases.
 - Check the proposed test design document for the upcoming administration for any design changes that might affect the QCS process (for example, new or revised fields in the student answer document).
 - Determine whether any new policies have been established since the last administration of the assessments that would affect how student answer documents are edited or how test scores are reported. Decide how these policies affect the QCS process and whether these new edits should be tested with additional test cases.
 - Create a new database of test cases. A new test administration will have most of the same test cases as the previous administration of the same assessment, but with additions or changes necessary to reflect new reporting policies or new conditions that should be tested.
 - Prepare a written test design consisting of coding and gridding instructions for ETS and Pearson.
 - Send the test design and text file to ETS and Pearson according to an approved schedule of processing deadlines created for the particular test administration.
2. Prepare, enter, and submit online test cases for fictitious students.
 - Create a database of test cases that simulate the exact steps that a student and test administrator would take on test day.
 - Verify that the score codes, accommodations and other test indicators are appropriate for the given administration.
 - Verify that the information on the test ticket matches the online test that is generated upon logging in.
 - Take tests by selecting the answers as outlined in the spreadsheet of test cases.

- Submit all the tests for scoring to ensure that responses and metadata, such as score code, responses, accommodations, test information attributes, and demographics information, are appropriately recorded and reported.
3. Receive raw score to scale score (RSSS) conversion tables from the contractors.
 - ETS and Pearson each send an RSSS conversion table to TEA. The RSSS table shows the scale score corresponding to each achievable raw score point for an assessment. These RSSS tables are used to convert the raw scores to scale scores and assign a passing status (for TAKS, STAAR Alternate 2, and STAAR) or proficiency rating (for TELPAS) for each test case. The tables are verified, approved, and incorporated into computer programs that produce the student and district/campus files and reports. Refer to the Equating section in [chapter 3, “Standard Technical Processes,”](#) for more information about RSSS conversation tables.
 4. Create a student-level data file. This file contains the data from the simulation of the processing of student answer documents from the test cases.
 - Verify that the resolved fields are correct in the database of test cases. The resolved fields simulate the changes that would be made in the ETS and Pearson editing process if coding or bubbling errors are made on the student answer document or if any defaulting conditions apply.
 - Export the student-level data file from the database.
 5. Receive a student-level data file from ETS and Pearson.
 - ETS and Pearson each sends an independently generated student-level data file to TEA with student names, demographic data, and scores for the tests that they administered. These files are the result of a procedure that, using the instructions in the test design provided and the Online tests taken by TEA, simulate the completion of student answer documents and online tests by districts, followed by processing, editing, and scoring of student answer documents by ETS and Pearson.
 6. Compare the TEA student-level data files to the student-level data files provided by the contractors.
 - For each record in the data file, compare every variable in the ETS and Pearson student-level data files with the corresponding variable in the TEA student-level data file.
 - Investigate each mismatch, if any, and determine the source and reason for the discrepancy.

- Make corrections, if necessary, in accordance with established policy and edit rules.
 - Repeat the process by regenerating student-level data files, comparing again, and resolving discrepancies until the data files from ETS and Pearson match the TEA data files.
7. Print reports.
- ETS and Pearson print reports (all standard and optional, individual and aggregated reports) for three fictitious districts for the tests that they administered and sends them to TEA.
 - A corresponding TEA report is produced for each ETS and Pearson report.
 - Reports by TEA, ETS, and Pearson are generated with independently produced computer programs.
8. Verify reports.
- The reports generated by TEA are compared to the reports provided by ETS and Pearson to verify that they contain identical information.
 - Any discrepancies found are investigated and corrected.
9. Approve reports.
- When all the reports for the fictitious districts are verified to be free of error, TEA notifies ETS and Pearson that reports can be posted on a secure website and shipped to school districts when their quality assurance process is complete.

