# Introduction

This Data Dictionary and Logical Data Model define all data elements involved in Smarter Balanced test results whether in a transmission format or stored in a database.

The Four-Layer Framework for Data Standards offers context for how this specification relates to other SmarterApp specifications. The four layers are:

1. Data Dictionary: Definition of data elements including name and interpretation.
2. Logical Data Model: Logical definition of entities as groups of elements and inter-entity relationships.
3. Serialization: Concrete digital format for storage or transmission of entities.
4. Protocol: Transport layer and message formats for exchanging serialized entities.

This specification describes test results at the Data Dictionary and Logical Data Model layers (layers 1 and 2). Other specifications address serialization and transmission protocols (layers 3 and 4). Field names and descriptions are mostly drawn from the Common Education Data Standards (CEDS) which also operates at layers 1 and 2.

The key words "MUST", "MUST NOT", "REQUIRED", "SHALL", "SHALL NOT", "SHOULD", "SHOULD NOT", "RECOMMENDED", "MAY", and "OPTIONAL" in this document are to be interpreted as described in RFC 2119.

## Extensibility

Nearly every test result format we have encountered includes additional information beyond the fields defined here. Data serialization formats should not be constrained to just these fields. Certain serialization formats like XML and JSON include standard extension mechanisms. Accordingly, extensions should be made at the serialization level. *Applications that receive data should tolerate and ignore fields that they don't recognize.*

# Logical Data Model

The entity-relationship diagram in Figure 1 represents the logical data model for test results.
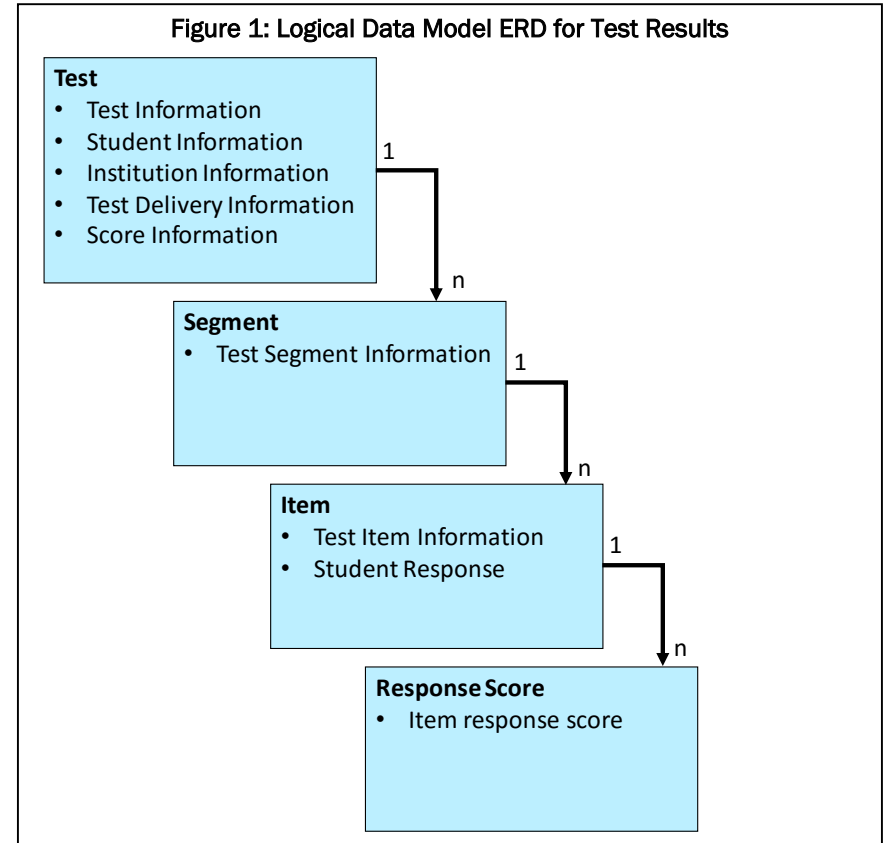
The data follows a strict hierarchy. Each test result has one **Test** record which contains information about the test itself; about the student and the institution to which the student belongs; about test delivery including date, time, and environment; and the overall test score information.

Each Test has one or more **segments**. Segments can be used for multi-part tests such as the Performance Task (PT) and Computer-Adaptive Test (CAT) portions of the Smarter Balanced summative tests. Segments may also be used for embedded field tests.

Each segment is composed of multiple assessment **items**. For fixed-form segments, all students are presented the same set of items in the same order. For computer-adaptive segments, the items presented and the order varies according to performance and other factors managed by the adaptive assessment engine. Each item record contains information about the assessment item and the full student response to the item.

An item has one or more **response scores** most items have a single score. However, certain items are scored on multiple dimensions each representing a different skill family. For multidimensional items there is one response score record per scoring dimension.

The hierarchical data organization is well-suited to certain serialization formats like XML and JSON. However, CSV is a more popular format for transmitting test results and it is not well-suited to hierarchical data. When rendering test results in tabular formats like CSV a common approach is to use two tables. One table represents the test information. The second table (usually in a different CSV file) collapses the segment, item, and response score information into a single table. Segment and item information is repeated for each score. Since most items have only one score and there is very little segment information in the data model, this approach is sufficiently efficient.

**Figure 1: Logical Data Model ERD for Test Results**

**Test**
- Test Information
- Student Information
- Institution Information
- Test Delivery Information
- Score Information

1 → n

**Segment**
- Test Segment Information

1 → n

**Item**
- Test Item Information
- Student Response

1 → n

**Response Score**
- Item response score

# Data Dictionaries

The following tables are the data dictionaries for each of the four entities: Test, Segment, Item, and ResponseScore.

## Cross References

The rightmost column has cross-references to the following layer 3 formats:

- **TRT:** The [SmarterApp Test Results Transmission format (http://www.smarterapp.org/specs/TestResultsTransmissionFormat.html)](http://www.smarterapp.org/specs/TestResultsTransmissionFormat.html).
- **DWSA:** The [SmarterApp Data Warehouse Student Assessment format (http://www.smarterapp.org/specs/DataWarehouse-DataSpec-StudentAssessments.html)](http://www.smarterapp.org/specs/DataWarehouse-DataSpec-StudentAssessments.html)
- **DWIL:** [The SmarterApp Data Warehouse Item Level format (http://www.smarterapp.org/specs/DataWarehouse-DataSpec-ItemLevel.html)](http://www.smarterapp.org/specs/DataWarehouse-DataSpec-ItemLevel.html)
- **AIR:** The American Institutes for Research export format used by certain members.

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# Entity:          Test

**Description:**          All fields that appear once per test report.

**Includes:**

- Test Information
- Student Information
- Institution Information
- Test Delivery Information
- Score Information

**Relationships**          1:n Test to Segment

**Occurrence**          One per test report.

Table 1: Test Entity Fields

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Test Information | | | | | | | |
| AssessmentId | xsd:token | 40 | A unique number or alphanumeric code assigned to an assessment by its publisher. | One or more printable characters | Always | [https://ceds.ed.gov/element/001067](https://ceds.ed.gov/element/001067) | **TRT:**testId **DWSA:**AssessmentGuid **AIR:**TstNm_ID |
| AssessmentName | xsd:token | 250 | The name given to an assessment **event**. | One or more printable characters | Always | [https://ceds.ed.gov/element/000977](https://ceds.ed.gov/element/000977) | **TRT:**name **AIR:**Test_Name |

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Subject | xsd:token | 10 | The subject of the test | Math, ELA, etc. | Always | See[1] https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=7021 | **TRT:**subject **DWSA:**AssessmentAcademicSubject **AIR:**TestSubj |
| DeliveryMode | xsd:token | 10 | Mode of the test. Either 'online' or 'paper' or 'scanned'. | online paper scanned[2] (obsolete) Defaults to "online". | Always | | **TRT:**mode **AIR:**TestMode |
| TestGrade | xsd:token | 2 | The typical grade or combination of grade-levels, developmental levels, or age-levels for which an assessment is designed. | IT, PR, PK, TK, KG, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, PS, UG | Always | https://ceds.ed.gov/element/000177 | **TRT:**grade **DWSA:**AssessmentLevelForWhichDesigned **AIR:**TestGrd |
| AssessmentType | xsd:token | 50 | The category of an assessment based on format and content. | Summative Interim | Always | https://ceds.ed.gov/element/000029 | **TRT:**assessmentType **DWSA:**AssessmentType |
| SchoolYear | xsd:integer | 4 | The school year in which the test is administered. For academic years that span a calendar year this is the four digit year-end. E.g. 2013 for 2012-2013 | 1900 <= YYYY <= 9999 | Always | https://ceds.ed.gov/element/000243 | **TRT:**academicYear **DWSA:**AssessmentYear **AIR:**SchlYr |
| AssessmentVersion | xsd:token | 30 | The version number of the Assessment Form. | Alphanumeric | Optional[3] | https://ceds.ed.gov/element/001183 | **TRT:**assessmentVersion |
| **Student Information** | | | | | | | |
| StudentIdentifier | xsd:token | 65 | For identified data this is the state-issued student ID. For de-identified data it is a unique ID that remains the same for a particular student year over year. [4] | One or more printable characters | Always (See footnote) | https://ceds.ed.gov/element/001071 | **TRT:**ExamineeAttribute-StudentIdentifier **DWSA:**StudentIdentifer **DWIL:**studentId **AIR:**SSID |
| ExternalSSID | xsd:token | 65 | An alternative to the state-issued student ID used by the assessment service provider or by other entities. May or may not be the Alternate Student ID used for de-identified data. | One or more printable characters | Optional | https://ceds.ed.gov/element/001071 | **TRT:**ExamineeAttribute-AlternateSSID **DWSA:**ExternalSSID |

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[1] The field definition for "Subject" matches CEDS. But the CEDS value enumeration is not used.

[2] The value of "scanned" for DeliveryMode is obsolete. Use "paper" for all paper deliveries regardless of how the test is scored or digitized.

[3] If the form changes, the AssessmentId should also change. Therefore, the version number is not yet a required field.

[4] For de-identified data, the State-Issued Student ID (SSID) MUST NOT be used. Any other method that generates a consistent ID for each student is acceptable. When de-identifying data, Smarter Balanced recommends applying a keyed-hash algorithm like HMAC-SHA1 to the SSID. For more information, see http://www.smarterapp.org/deployment/HashStudentIdSample.html and http://www.smarterapp.org/deployment/DeidentificationOfStudentIDs.html,

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| FirstName | xsd:token | 35 | Student first name | One or more printable characters. | Identifed: Required<br>Deidentified: Prohibited | https://ceds.ed.gov/element/000115 | **TRT:**ExamineeAttribute-FirstName<br>**DWSA:**FirstName |
| MiddleName | xsd:token | 35 | Student middle name | One or more printable characters. | Identifed: Optional<br>Deidentified: Prohibited | https://ceds.ed.gov/element/000184 | **TRT:**ExamineeAttribute-MiddleName<br>**DWSA:**MiddleName |
| LastOrSurname | xsd:token | 35 | Student last name | One or more printable characters. | Identifed: Required<br>Deidentified: Prohibited | https://ceds.ed.gov/element/000172 | **TRT:**ExamineeAttribute-LastOrSurname<br>**DWSA:**LastOrSurname |
| Birthdate | xsd:date | 10 | Student's birthdate | YYYY-MM-DD[5]. For example 2006-07-15 | Identifed: Required<br>Deidentified: Prohibited | https://ceds.ed.gov/element/000033 | **TRT:**ExamineeAttribute-Birthdate<br>**DWSA:**Birthdate |
| GradeLevelWhenAssessed | xsd:token | 2 | The grade or developmental level of a student when assessed. | IT, PR, PK, TK, KG, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, PS, UG | Always | https://ceds.ed.gov/element/000126 | **TRT:**ExamineeAttribute-GradeLevelWhenAssessed<br>**DWSA:**GradeLevelWhenAssessed<br>**AIR:**Grade |
| Sex | xsd:token | 6 | The student's gender. | Male, Female | Always | https://ceds.ed.gov/element/000255 | **TRT:**ExamineeAttribute-Sex<br>**DWSA:**Sex<br>**AIR:**Gndr |
| HispanicOrLatinoEthnicity | xsd:token | 3 | An indication that the person traces his or her origin or descent to Mexico, Puerto Rico, Cuba, Central and South America, and other Spanish cultures, regardless of race. | Yes, No | Always | https://ceds.ed.gov/element/000144 | **TRT:**ExamineeAttribute-HispanicOrLatinoEthnicity<br>**DWSA:**HispanicOrLatinoEthnicity<br>**AIR:**HispEthnicFg |
| AmericanIndianOrAlaskaNative | xsd:token | 3 | A person having origins in any of the original peoples of North and South America (including Central America), and who maintains cultural identification through tribal affiliation or community attachment. | Yes, No | Always | https://ceds.ed.gov/element/000016 | **TRT:**ExamineeAttribute-AmericanIndianOrAlaskaNative<br>**DWSA:**AmericanIndianOrAlaskaNative<br>**AIR:**AmerIndianAlsknNtvRaceFg |

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[5] All dates and times SHOULD follow the W3C recommended formats (http://www.w3.org/TR/NOTE-datetime) which are a profile of ISO 8601.

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Asian | xsd:token | 3 | A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian Subcontinent. This area includes, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam. | Yes, No | Always | https://ceds.ed.gov/element/000020 | **TRT:**ExamineeAttribute-Asian **DWSA:**Asian **AIR:**AsianRaceFg |
| BlackOrAfricanAmerican | xsd:token | 3 | A person having origins in any of the black racial groups of Africa. | Yes, No | Always | https://ceds.ed.gov/element/000034 | **TRT:**ExamineeAttribute-BlackOrAfricanAmerican **DWSA:**BlackOrAfricanAmerican **AIR:**BlackRaceFg |
| White | xsd:token | 3 | A person having origins in any of the original peoples of Europe, Middle East, or North Africa. | Yes, No | Always | https://ceds.ed.gov/element/000301 | **TRT:**ExamineeAttribute-White **DWSA:**White **AIR:**WhiteRaceFg |
| NativeHawaiianOrOtherPacificIslander | xsd:token | 3 | A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. | Yes, No | Always | https://ceds.ed.gov/element/000192 | **TRT:**ExamineeAttribute-NativeHawaiianOrOtherPacificIslander **DWSA:**NativeHawaiianOrOtherPacificIslander **AIR:** PacIsIndrRaceFg |
| TwoOrMoreRaces | xsd:token | 3 | A person having origins in any of more than one of the racial groups.[6] | Yes, No | Always | https://ceds.ed.gov/element/000973 | **TRT:**ExamineeAttribute-DemographicRaceTwoOrMoreRaces **DWSA:**DemographicRaceTwoOrMoreRaces **AIR:**DemographicRaceTwoOrMoreRaces |
| IDEAIndicator | xsd:token | 3 | Student has an Individual Education Plan according to the IDEA act. (See reference for the full definition). | Yes, No | Always | https://ceds.ed.gov/element/000151 | **TRT:**ExamineeAttribute-IDEAIndicator **DWSA:**IDEAIndicator **AIR:**IEP |
| LEPStatus | xsd:token | 3 | Student with Limited English Proficiency (See reference for the full definition). | Yes, No | Always | https://ceds.ed.gov/element/000180 | **TRT:**ExamineeAttribute-LEPStatus **DWSA:**LEPStatus **AIR:**LEP |

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[6] Per the CEDS data dictionary, DemographicRaceTwoOrMoreRaces is to support inbound data from systems that cannot derive that value. "i.e. systems that use a single race/ethnicity element rather than separate flags that can indicate one or more ethnicities."

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Section504Status | xsd:token | 3 | Individuals with disabilities who are being provided with related aids and services under Section 504 of the Rehabilitation Act of 1973, as amended. | Yes, No | Always | https://ceds.ed.gov/element/000249 | **TRT:**ExamineeAttribute-Section504Status **DWSA:** Section504Status **AIR:**504Plan |
| EconomicDisadvantageStatus | xsd:token | 3 | An indication that the student met the State criteria for classification as having an economic disadvantage. | Yes, No, Unspecified | Always | https://ceds.ed.gov/element/000086 | **TRT:**ExamineeAttribute-EconomicDisadvantageStatus **DWSA:**EconomicDisadvantageStatus **AIR:**EconomicDisadvantageStatus |
| LanguageCode | xsd:token | 3 | The code for the specific language or dialect that a person uses to communicate. | See http://ceds.ed.gov/languageCodes.aspx | Optional | https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=7317 | **TRT:**ExamineeAttribute-LanguageCode |
| EnglishLanguageProficiencyLevel | xsd:token | 20 | A state-specific indication of the student's English language proficiency level. | Should match a state-specific taxonomy, | Optional | Related to https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=5527 | **TRT:**ExamineeAttribute-EnglishLanguageProficiencyLevel **AIR:**EnglishLanguageProficiencyLevel |
| MigrantStatus | xsd:token | 3 | Student and/or parents are migratory. (See reference for the complete definition.) | Yes, No | Optional | https://ceds.ed.gov/element/000189 | **TRT:**ExamineeAttribute-MigrantStatus **AIR:**MigrantStatus |
| FirstEntryDateIntoUSSchool | xsd:date | 10 | The year, month and day of a person's initial enrollment into a United States school. | YYYY-MM-DD | Optional | https://ceds.ed.gov/element/000529 | **TRT:**ExamineeAttribute-FirstEntryDateIntoUSSchool **AIR:**FirstEntryDateIntoUSSchool |
| LimitedEnglishProficiencyEntryDate | xsd:date | 10 | The year, month and day a student classified as limited English proficient entered the LEP program. | YYYY-MM-DD | Optional | https://ceds.ed.gov/element/001247 | **TRT:**ExamineeAttribute-LimitedEnglishProficiencyEntryDate **AIR:**LimitedEnglishProficiencyEntryDate |
| LEPExitDate | xsd:date | 10 | The year, month and day a student classified as limited English proficient exited the LEP program. | YYYY-MM-DD | Optional | https://ceds.ed.gov/element/000570 | **TRT:**ExamineeAttribute-LEPExitDate **AIR:**LEPExitDate |
| TitleIIILanguageInstructionProgramType | xsd:token | 20 | The type of Title III language instructional programs. | See the reference for the set of acceptable codes and definitions. | Optional | https://ceds.ed.gov/element/000447 | **TRT:**ExamineeAttribute-TitleIIILanguageInstructionProgramType **AIR:**TitleIIILanguageInstructionProgramType (opt) |

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| PrimaryDisabilityType | xsd:token | 3 | The major or overriding disability condition that best describes a person's impairment. | See the reference for the set of acceptable codes and definitions. | Optional | https://ceds.ed.gov/element/000218 | **TRT:**ExamineeAttribute-PrimaryDisabilityType<br>**AIR:**PrimaryDisabilityType |
| **Institution Information** | | | | | | | |
| StateAbbreviation | xsd:token | 2 | Abbreviation for the state or territory in which the student attends school. | A two-letter state or territory abbreviation according to U.S. Postal standards. | Required | https://ceds.ed.gov/element/000267 | **TRT:**ExamineeRelationship-StateAbbreviation<br>**DWSA:**StateAbbreviation |
| DistrictId | xsd:token | 40 | The ID of the district responsible for specific educational services and/or instruction of the student. | Alphanumeric | Identifed: Required<br>Deidentified: Optional[7] | https://ceds.ed.gov/element/000637 | **TRT:**ExamineeRelationship-DistrictId<br>**DWSA:**ResponsibleDistrictIdentifier<br>**AIR:**DistrictID |
| DistrictName | xsd:token | 60 | The Name of the district responsible for specific educational services and/or instruction of the student. | Alphanumeric | Optional | https://ceds.ed.gov/element/000204 | **TRT:**ExamineeRelationship-DistrictName<br>**DWSA:**OrganizationName |
| SchoolId | xsd:token | 40 | A unique number or alphanumeric code assigned to an institution by a school, school system, a state, or other agency or entity. | Alphanumeric | Identifed: Required<br>Deidentified: Optional | https://ceds.ed.gov/element/001069 | **TRT:**ExamineeRelationship-SchoolId<br>**DWSA:**ResponsibleSchoolIdentifier<br>**AIR:**SchoolID |
| SchoolName | xsd:token | 60 | The full legally accepted name of the institution. | Alphanumeric | Optional | https://ceds.ed.gov/element/000191 | **TRT:**ExamineeRelationship-SchoolName<br>**DWSA:**NameOfInstitution |
| StudentGroupNames | xsd:token | 50 | One or more names of groups to which the student belongs. These may be classes, categories, programs or other groups that serve local needs.<br>The physical format specification should indicate the format of the list (e.g. semicolon-delimited string, list of XML elements, JSON array, etc. | Up to ten names of up to 50 characters each. | Optional | | **TRT:**ExamineeRelationship-StudentGroupName<br>**DWSA:**Group1Id to Group10Id |

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[7] DistrictId, DistrictName, SchoolId, and SchoolName are optional in de-identified data. In certain areas, the school or district may be small enough that the school and/or district combined with gender, race, and ethnicity can identify the student. In those cases, the district and school information should be omitted to preserve student privacy. However, doing so prevents the generation of anonymous aggregate reports at the school and district level. Accordingly, members should choose their policy for inclusion according to local policy, population patterns, and requirements.

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Test Delivery Information | | | | | | | |
| TestOpportunityId[8] | xsd:token | 40 | A unique identifier of the student-test opportunity. (Typically a GUID) | One or more printable characters | Always | https://ceds.ed.gov/element/001540 | **TRT:**Opportunity-Key TRT see also Opportunity-oppId **AIR:**VndrTstEvent_ID |
| AssessmentAdministrationStartDate | xsd:date | 10 | The first date of the first window for a given assessment. | YYYY-MM-DD | Always | https://ceds.ed.gov/element/000962 | **TRT:**effectiveDate |
| StartDateTime | xsd:dateTime | 23 | The actual date and time when the individual started taking the test. | YYYY-MM-DDTHH:MM:SS | Always | https://ceds.ed.gov/element/001021 | **TRT:**startDate **AIR:**TStartDt |
| SubmitDateTime | xsd:dateTime | 23 | Date the opportunity was submitted for scoring. | YYYY-MM-DDTHH:MM:SS | Always | https://ceds.ed.gov/element/001022 | **TRT:**dateCompleted **AIR:**TEndDt |
| ForceSubmitted | xsd:token | 23 | Indicates whether a test was force-submitted in behalf of the student. This may be an incomplete test (not all questions answered) or a complete test in which the student neglected to explicitly submit final answers.[9] | (Blank) Yes No | Optional | | **TRT:**dateForceCompleted |
| Status | xsd:token | 50 | Status of the opportunity. Tracks the status of this test opportunity through the process of administration, resets, scoring, and reporting. | Appeal, handscoring, paused, reported, reset, scored, submitted Deprecated Values[10]: completed, expired, invalidated | Optional | | **TRT:**status **AIR:**TestStatus |
| StatusDateTime | xsd:dateTime | 23 | The date and time the status of this opportunity last changed. | YYYY-MM-DDTHH:MM:SS | Optional | | **TRT:**statusDate |

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[8] Some serialization formats, such as CSV, use separate tables for test level data and item level data. In those cases, the TestOpportunityId is the key used to connect data between the two tables.

[9] See also Completeness.

[10] Status values of "completed", "expired", and "invalidated" should no longer be used. The Completeness field should be used to represent "completed" and "expired". The AdministrationCondition field should be used to represent "invalidated".

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| AdministrationCondition[11] | xsd:token | 7 | Conditions of the test administration:<br>• **Valid or (Blank)** indicates that the assessment was given in a standardized (proctored) environment. Typically applied to summative assessments.<br>• **Invalid (IN)** indicates that the test result has been marked invalid due to problems in the test administration or environment. Typically applied to summative assessments.<br>• **Standardized (SD)** The assessment was administered in a standardized manner. It is appropriate to compare this score with other scores in the same manner. Typically applied to interim assessments.<br>• **Nonstandardized (NS)** The assessment was administered in an informal – nonstandardized manner.<br>Standardized and Nonstandardized results are considered valid. | (blank)<br>Valid<br>SD<br>NS<br>IN | Always | | **TRT:**administrationCondition<br>**DWSA:**administrationCondition |
| Completeness[12] | xsd:token | 8 | Completeness of the test (whether student responded to all items in the test). | Partial<br>Complete (or blank) | Always | | **TRT:**completeStatus<br>**DWSA:**completeStatus |
| AccessibilityCodes | xsd:token | 1000 | A list of accessibility feature codes paired with accessibility feature use codes indicating the accessibility resources that were made available to the student.<br>The physical format of the list and delimiters should be specified in the data serialization specification. | See the "ISAAP Accessibility Feature Codes" specification.[13] | Always | See: https://ceds.ed.gov/element/000385 | **TRT:**Accommodation-Code<br>**DWSA:** Accommodation[14]<br>**AIR:**Accommodation |

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[11] For Smarter Balanced assessments, rules for establishing test validity are in the Test Administration Manual. Valid tests must also meet the requirements of the Smarter Balanced Usability, Accessibility, and Accommodations Guidelines (UAAG) which is available on SmarterBalanced.org.

[12] Rules for determining completeness and for scoring incomplete tests are included in the Test Scoring Specifications sections 3.1.1 and 3.1.2. See http://www.smarterapp.org/specs/TestScoringSpecs.html.

[13] ISAAP Accessibility Feature Codes: http://www.smarterapp.org/specs/ISAAP-AccessibilityFeatureCodes.html. The physical format of the list should be specified in the data serialization specification. Some formats are more convenient for compatibility while other facilitate analytics.

[14] As of 2015 The DWSA format uses separate fields for each accessibility code family.

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| NumberOfResponses | xsd:unsignedInt | 8 | Number of items in this report. (Early software releases may include prefetched items that the student never saw but this behavior is discouraged). | Integer, 0 or greater | Always | https://ceds.ed.gov/element/001009 | **TRT:**ItemCount **AIR:**NAttempt |
| FieldTestCount | xsd:unsignedInt | 8 | Number of field test items included in Itemcount | Integer, 0 or greater | Optional | | **TRT:**ftCount |
| PauseCount | xsd:unsignedInt | 8 | number of times Examinee paused the opportunity | Integer, 0 or greater | Optional | | **TRT:**pauseCount **AIR:**TOT_NUM_PAUSED |
| GracePeriodRestarts | xsd:unsignedInt | 8 | The number of times the student paused the test and restarted it within the grace period (typically 20 minutes). | Integer, 0 or greater | Optional | | **TRT:**gracePeriodRestarts **AIR:**NUM_PAUSED_20 |
| AbnormalStarts | xsd:unsignedInt | 8 | The number of times the test was restarted after an abrupt end to a test (browser crash, power shutdown, network loss etc.). | Integer, 0 or greater | Optional | | **TRT:**abnormalStarts |
| OpportunityCount | xsd:unsignedInt | 8 | The number of times the student has taken this test including the present opportunity. | Integer, 1 or greater | Optional | | **TRT:**opportunity **AIR:**Oprtnty |
| TestWindowId | xsd:token | 50 | The ID of the window in which the test was administered (E.g. SBAC-Spring-2015) | One or more printable characters | Always | | **TRT:**windowId |
| TestSessionId | xsd:token | 40 | Test Delivery System ID for the session in which this test was taken. Typically unique to a time, location, and test administrator. | Zero or more printable characters | De-identified: Prohibited Otherwise: Optional | | **TRT:**sessionId **DWSA:**AssessmentSessionLocationId **AIR:**TASessionID |
| TestAdministratorId | xsd:token | 128 | ID of the Test Administrator that administered this test. (Often the email address of the TA has been used but this is discouraged for privacy reasons.) | Zero or more printable characters | De-identified: Prohibited Otherwise: Optional | https://ceds.ed.gov/element/001572 | **TRT:**TAID **AIR:**TAUserID |
| OrganizationName | xsd:token | 60 | The name of the organization with overall responsibility for the assessment event. Typically the name of the state (e.g. "Oregon") | One or more printable characters | Optional | https://ceds.ed.gov/element/000966 | **TRT:**clientName |
| UserAgent | xsd:string | 512 | The User-Agent string from a web browser or other string that follows the same format.[15] | Alphanumeric | Online: Always | https://ceds.ed.gov/element/001152 | **TRT:**assessmentParticipantSessionPlatformUserAgent |

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[15] CEDS defines this as "A space-delimited list of product tokens (keywords) with optional comments that identifies the client hardware and software with which the assessment was delivered to the student during the assessment session." That is the format in which User-Agent strings are delivered. See http://useragentstring.com and http://www.w3.org/Protocols/rfc2616/rfc2616-sec14.html#sec14.43.

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| TestDeliveryServer | xsd:token | 128 | Name of the Test Delivery Service (TDS server that was used to administer this test. | One or more printable characters | Optional | | **TRT:**server |
| TestDeliveryDatabase | xsd:token | 128 | Name of the TDS DB that was used to administer this test. | Zero or more printable characters | Optional | https://ceds.ed.gov/element/001539 | **TRT:**database |
| WindowOpportunityCount | xsd:unsignedInt | 8 | The number of times a student has taken this test in this window including this instance. | Integer, 1 or greater | Optional | | **TRT:**windowOpportunity |
| Test Score Information | | | | | | | |
| ScaleScore | xsd:float | 8 | The overall Scale Score earned by the student on this test. | A positive number, typically an integer. | Always | https://ceds.ed.gov/element/000245 | **TRT:**Score/value[16] **DWSA:**AssessmentSubtestResultScoreValue **AIR:**SS_TOT |
| ScaleScoreStandardError | xsd:float | 8 | The standard error for the TestScaleScore | Floating point number | Always | https://ceds.ed.gov/element/001546 | **TRT:**Score/standardError **DWSA:**AssessmentSubtestMinimumValue[17] **AIR:**SEM_TOTSS |
| ScaleScoreAchievementLevel | xsd:integer | 1 | The achievement level corresponding to the scale score. | For Smarter Balanced, overall achievement levels are 1 to 4. | Always | https://ceds.ed.gov/element/000245 | **TRT:**Score/value **DWSA:**AssessmentPerformanceLevelIdentifier **AIR:**PL_TOT |
| OverallTheta[18] | xsd:float | 8 | The overall theta value | Floating point number | Required for Validity Studies[19] | | **AIR:**THETA_TOT |
| OverallThetaStandardError | xsd:float | 8 | The standard error for the overall theta | Floating point number | Required for Validity Studies | | **AIR:**SEM_TOT_THETA |

[16] The TRT format uses the <Score> element for all scores and standard errors. See Appendix A for how to identify each particular score.

[17] In place of Standard Error, the DWSA format uses AssessmentSubtestMinimumValue and AssessmentSubtestMaximumValue which are the scale score minus and plus the standard error respectively. The same principle is applied to subscores which use AssessmentSubtestClaim1MinimumValue and AssessmentSubtestClaim1MaximumValue (substituting the claim number for 1 in subsequent claims).

[18] Theta Score and Theta Standard Error are the values calculated before conversion to Scale Score and application of HOSS and LOSS values.

[19] Beginning in School Year 2015-2016 Theta scores are required for the overall score and for claim scores. In this year, members have been given multiple options for applying the Highest Operational Scale Score (HOSS) and Lowest Operational Scale Score (LOSS) when calculating the Scale Score from the Theta Score. When comparing scores from year to year, Scale Scores should be re-calculated from the Theta Score using consistent HOSS and LOSS values.

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Claim1Score | xsd:float | 8 | Score for claim #1<br><br>For Smarter Balanced:<br>• ELA Claim 1 is Reading<br>• Math Claim 1 is Concepts & Procedures | A positive number, typically an integer. | Conditional[20] | https://ceds.ed.gov/element/000245 | **TRT:** Score/value<br>**DWSA:**AssessmentSubtestREsultScoreClaim1Value<br>**AIR:**SS_SRC1 |
| Claim1ScoreStandardError | xsd:float | 8 | Standard error for claim #1 | Floating point number | Conditional | https://ceds.ed.gov/element/001546 | **TRT:** Score/standardError<br>**DWSA:**AssessmentSubtestResultScoreClaim1MinimumValue<br>**AIR:**SEM_SRC1 |
| Claim1ScoreAchievementLevel | xsd:integer | 1 | The achievement level corresponding to claim score #1 | For Smarter Balanced, claim achievement levels are 1 to 3. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:** Score/value<br>**DWSA:**AssessmentClaim1PerformanceLevelIdentifier<br>**AIR:**PL_SRC1 |
| Claim1Theta | xsd:float | 8 | The theta value for claim #1 | Floating point number | Required for Validity Studies | | **AIR:**THETA_SRC1 |
| Claim1ThetaStandardError | xsd:float | 8 | Standard error for the claim 1 theta | Floating point number | Required for Validity Studies | | **AIR:**SEM_THETA_SRC1 |
| Claim2Score | xsd:float | 8 | Score for claim #2<br><br>For Smarter Balanced:<br>• ELA Claim 2 is Writing<br>• Math combines the scores for Claim 2-Problem Solving, and Claim 4-Modeling and Data Analyisis into ClaimScore2 | A positive number, typically an integer. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:**Score/value<br>**DWSA:**AssessmentSubtestREsultScoreClaim2Value<br>**AIR:**SS_SRC2 |
| Claim2ScoreStandardError (Score/standardError) | xsd:float | 8 | Standard error for claim #2 | Floating point number | Conditional | https://ceds.ed.gov/element/001546 | **TRT:**Score/standardError<br>**DWSA:**AssessmentSubtestResultScoreClaim2MinimumValue<br>**AIR:**SEM_SRC2 |
| Claim2ScoreAchievementLevel | xsd:integer | 1 | The achievement level corresponding to claim score #2 | For Smarter Balanced, claim achievement levels are 1 to 3. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:**Score/value<br>**DWSA:**AssessmentClaim2PerformanceLevelIdentifier<br>**AIR:**PL_SRC2 |

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[20] Claim scores are required if the associated test produces them. For example, the Smarter Balanced summative tests produce four claim scores for ELA and three for Mathematics. When a claim score is present, the associated standard error and achievement level are also required. Interim Assessment Block (IAB) assessments do not generate claim scores.

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Claim2Theta | xsd:float | 8 | The theta value for claim #1 | Floating point number | Required for Validity Studies | | **AIR:**THETA_SRC1 |
| Claim2ThetaStandardError | xsd:float | 8 | Standard error for the claim 1 theta | Floating point number | Required for Validity Studies | | **AIR:**SEM_THETA_SRC1 |
| Claim3Score | xsd:float | 8 | Score for claim #3<br>For Smarter Balanced:<br>• ELA Claim 3 is Speaking and Listening<br>• Math Claim 3 is Communicating Reasoning | A positive number, typically an integer. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:**Score/value<br>**DWSA:**AssessmentSubtestREsultScoreClaim3Value<br>**AIR:**SS_SRC3 |
| Claim3ScoreStandardError | xsd:float | 8 | Standard error for claim #3 | Floating point number | Conditional | https://ceds.ed.gov/element/001546 | **TRT:**Score/standardError<br>**DWSA:**AssessmentSubtestResultScoreClaim3MinimumValue<br>**AIR:**SEM_SRC3 |
| Claim3ScoreAchievementLevel | xsd:integer | 1 | The achievement level corresponding to claim score #3. | For Smarter Balanced, claim achievement levels are 1 to 3. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:**Score/value<br>**DWSA:**AssessmentClaim3PerformanceLevelIdentifier<br>**AIR:**PL_SRC3 |
| Claim3Theta | xsd:float | 8 | The theta value for claim #1 | Floating point number | Required for Validity Studies | | **AIR:**THETA_SRC3 |
| Claim3ThetaStandardError | xsd:float | 8 | Standard error for the claim 1 theta | Floating point number | Required for Validity Studies | | **AIR:**SEM_THETA_SRC3 |
| Claim4Score | xsd:float | 8 | Score for claim #4<br>For Smarter Balanced:<br>• ELA Claim 4 is Research/Inquiry<br>• Math does not use this value as claim 4 is combined with claim 2. | A positive number, typically an integer. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:**Score/value<br>**DWSA:**AssessmentSubtestREsultScoreClaim4Value<br>**AIR:**SS_SRC4 |
| Claim4ScoreStandardError | xsd:float | 8 | Standard error for claim #4 | Floating point number | Conditional | https://ceds.ed.gov/element/001546 | **TRT:**Score/standardError<br>**DWSA:**AssessmentSubtestResultScoreClaim4MinimumValue<br>**AIR:**SEM_SRC4 |
| Claim4ScoreAchievementLevel | xsd:integer | 1 | The achievement level corresponding to claim score #4. | For Smarter Balanced, claim achievement levels are 1 to 3. | Conditional | https://ceds.ed.gov/element/000245 | **TRT:**Score/value<br>**DWSA:**AssessmentClaim4PerformanceLevelIdentifier<br>**AIR:**PL_SRC4 |

| Test Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Claim4Theta | xsd:float | 8 | The theta value for claim #1 | Floating point number | Required for Validity Studies | | **AIR:**THETA_SRC4 |
| Claim4ThetaStandardError | xsd:float | 8 | Standard error for the claim 1 theta | Floating point number | Required for Validity Studies | | **AIR:**SEM_THETA_SRC4 |

# Entity　　　　Segment

**Description**　　Information about one test segment.

**Relationships**　　n:1 Segment to Test
1:n Segment to Item

**Occurrence**　　One occurrence per test segment included in a test. Most Smarter Balanced tests have one segment which is either fixed-form or computer-adaptive.

### Table 2: Segment Entity Fields

| Segment Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| SegmentId | xsd:token | 40 | Identifier for this test segment (unique per test) | One or more printable characters | Optional | https://ceds.ed.gov/element/000367 | **TRT:**Segment/id **DWIL:**segmentId **AIR:**SegmentId |
| SegmentPosition | xsd:unsignedInt | 8 | Position of the segment on the test. | Positive 32-bit integer, null allowed | Optional | | **TRT:**Segment/position |
| SelectionAlgorithm | xsd:token | 40 | Item selection algorithm that was used for this segment. "Fixed" for a fixed-form segment. Otherwise an identifier of the algorithm and its configuration. | One or more printable characters | Optional | | **TRT:**Segment/algorithm |
| SelectionAlgorithmVersion | xsd:token | 40 | Item selection algorithm version | One or more printable characters | Optional | | **TRT:**Segment/algorithmVersion |

# Entity        Item

**Description:**        Information about one test item.

**Includes:**

- Item information
- Student response

**Relationships:**        n:1 Item to Segment
1:n Item to ResponseScore

**Occurrence:**        One occurrence per item delivered to a student in a test session.

Table 3: Item Entity Fields

| Item Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| **Item Information** | | | | | | | |
| ItemId | xsd:token | 40 | Item ID assigned by the Test Publisher.[21] | String of printable characters | Always | https://ceds.ed.gov/element/000630 | **TRT:**Item/key Item/bankKey **DWIL:**key **AIR:**Item_ID |
| ItemPosition | xsd:unsignedInt | 8 | Ordinal position of item on test. E.g. 1 for the first item presented to the student. | Positive 32-bit integer | Always | | **TRT:**Item/position **DWIL:**position **AIR:**ItemOrdr |
| FieldTest | xsd:token | 3 | Indicates that the assessment item is being field tested on this form of the test, and does not contribute to the test score. | Yes, No | Optional (defaults to "No") | https://ceds.ed.gov/element/001536 | **TRT:**Item/operational **DWIL:**operational **AIR:**item_life_stage |
| Dropped | xsd:token | 3 | Indicates that the item was dropped from the test and is not to be included for scoring. | Yes, No | Optional (defaults to "No") | | **TRT:**Item/dropped **DWIL:**dropped |
| ItemType | xsd:token | 40 | Item type (e.g. MC (multiple choice) or GI (grid item)). | EBSR, EQ, ER, GI, HT, HTQ, MC, MI, MS, NL, SA, TI, TUT, WER, WORDLIST, Stimulus | Optional | https://ceds.ed.gov/element/001158 | **TRT:**Item/format **DWIL:**format **AIR:**Item_format |
| **Student Response Information** | | | | | | | |
| AdminDateTime | xsd:dateTime | 23 | Date and time item was administered to Examinee | YYYY-MM-DDTHH-MM-SS | Always | https://ceds.ed.gov/element/000959 https://ceds.ed.gov/element/000958 | **TRT:**Item/adminDate |

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[21] Original Smarter Balanced item IDs are in the form "<bankKey>-<itemKey>" (e.g. "200-12345"). Future IDs may be in GUID form (e.g. 866bed0d-0fa5-40e0-90c7-02d3edd51449) or other forms.

| Item Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| Submitted | xsd:token | 3 | Indicates whether the student submitted a response to this item | Yes,No | Optional (defaults to "Yes") | | **TRT:**Item/isSelected<br>**DWIL:**isSelected |
| SubmitDateTime | xsd:dateTime | 23 | Date and time the student submitted a response to the item. | YYYY-MM-DDTHH-MM-SS | Optional | https://ceds.ed.gov/element/000959<br>https://ceds.ed.gov/element/000958 | **TRT:**Item/Response/date<br>**DWIL:**adminDate |
| NumberOfVisits | xsd:unsignedInt | 8 | Number of times the student set or changed a response to the item | Integer 1 or greater | Optional | | **TRT:**numberVisits<br>**DWIL:**numberVisits<br>**AIR:**NbrItemVisits |
| ResponseDuration | xsd:float | 8 | The total amount of time in that a person spent responding to a given assessment item.<br>When multiple items are on a page, the time on that page MAY be divided evenly among the items.[22] | Time spent in seconds. Decimals may express fractions of seconds. | Required[23] | https://ceds.ed.gov/element/000402 | **TRT:**pageTime ÷ pageVisits |
| ResponseContentType | xsd:token | 50 | MIME type of item response. E.g. text/plain | One or more printable characters | Optional | | **TRT:**Item/mimeType<br>**AIR:**RespTypCd |
| ResponseValue | xsd:string | unlimited | The student's response to the item. | | Online: Always | https://ceds.ed.gov/element/001063 | **TRT:**Item/Response<br>**AIR:**Response |

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[22] A common type of analysis is to take the sum of time spent on items to estimate the time spent taking a test. Therefore, allocation of time to items SHOULD be done in such a way that taking the sum of times produces an accurate estimate of aggregate time (e.g. time on test or time on segment). Many test delivery systems can only measure time spent on a page, not time spent on an item. When multiple items are on a single page then the page time SHOULD be divided among the items. When there is a reading passage associated with a set of items, the time spent reading the passage SHOULD be divided among the associated items.

[23] ResponseDuration is newly required as of SY 2015-2016.

# Entity          ResponseScore

Description      Represents a student's score for a test item.

Relationships    n:1 ItemScore to Item

Occurrence       Most items have a single score. However, certain items such as extended writing have scores in multiple dimensions. In those cases, there will be one ItemScore instance per dimension.

Table 4: ResponseScore Entity Fields

| ResponseScore Field Name | Data Type | Width (chars) | Description | Acceptable Values | Required | Reference | Cross Reference |
|---|---|---|---|---|---|---|---|
| ItemScore | xsd:float | 8 | The score given to a person's response to an assessment item. | unsigned float | Always | https://ceds.ed.gov/element/000724 | **TRT:**Item/score **DWIL:**score **AIR:**ItemScore |
| ScoreDimension | xsd:token | 0 | Dimension name or code to which this score corresponds. | One or more printable characters. May be blank or omitted if the item has only one scoring dimension. | Required if item has more than one scoring dimension. | | **TRT:**Item/ScoreInfo/scoreDimension **AIR:**ScoringDimension |
| Rater1Score | xsd:float | 8 | The score given by hand scoring rater 1 | Unsigned float | Required for Validity Studies | https://ceds.ed.gov/element/000724 | **AIR:**Scr_Rater1 |
| Rater1UserId | xsd:string | 50 | ID of the user who scored human-scored item | Alphanumeric ID up to 50 characters. | See Footnote[24] | https://ceds.ed.gov/element/001572 | **TRT:**userId **AIR:**ID_Rater1 |
| Rater2Score | xsd:float | 8 | The score given by hand scoring rater 1 | Unsigned float | Required for Validity Studies | https://ceds.ed.gov/element/000724 | **AIR:**Scr_Rater2 |
| Rater2UserId | xsd:string | 50 | ID of the user who scored human-scored item | Alphanumeric ID up to 50 characters. | See Footnote | https://ceds.ed.gov/element/001572 | **TRT:**userId **AIR:**ID_Rater2 |
| Rater3Score | xsd:float | 8 | The score given by hand scoring rater 1 | Unsigned float | Required for Validity Studies | https://ceds.ed.gov/element/000724 | **AIR:**Scr_Rater2 |
| Rater3UserId | xsd:string | 50 | ID of the user who scored human-scored item | Alphanumeric ID up to 50 characters. | See Footnote | https://ceds.ed.gov/element/001572 | **TRT:**userId **AIR:**ID Rater3 |
| ScoreRationale | xsd:string | 255 | Rationale given by the human scorer. If multiple raters gave rational may be concatenated messages. | Printable text. | Optional | | |

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[24] Rater IDs are required for validity studies; otherwise optional. In de-identified data, rater IDs must not identify the actual person. For example, an email address would be inappropriate. A numeric ID would be acceptable. A keyed cryptographic hash like the one suggested for StudentId MAY be used to convert an ID that would otherwise be sensitive.

# Appendix A: Test Results Transmission Format – Scores

The TRT format uses the <Score> element for all scores. In each case, the "value" attribute provides the score value and the "standardError" attribute indicates the standard error value. Scores are distinguished by the "measureOf" and "measureLabel" attributes according to the following table:

| | measureOf | measureLabel |
|---|---|---|
| Overall test scale score | Overall | ScaleScore |
| Overall test achievement level | Overall | PerformanceLevel |
| Math Claim 1 scale score | 1 | ScaleScore |
| Math Claim 1 achievement level | 1 | PerformanceLevel |
| ELA Claim 1 scale score | SOCK_R | ScaleScore |
| ELA Claim 1 achievement level | SOCK_R | PerformanceLevel |
| Math Claim 2,4 scale score | SOCK_2 | ScaleScore |
| Math Claim 2,4 achievement level | SOCK_2 | PerformanceLevel |
| ELA Claim 2 scale score | 2-W | ScaleScore |
| ELA Claim 2 achievement level | 2-W | PerformanceLevel |
| Math Claim 3 scale score | 3 | ScaleScore |
| Math Claim 3 achievement level | 3 | PerformanceLevel |
| ELA Claim 3 scale score | SOCK_LS | ScaleScore |
| ELA Claim 3 achievement level | SOCK_LS | PerformanceLevel |
| ELA Claim 4 scale score | 4-CR | ScaleScore |
| ELA Claim 4 achievement level | 4-CR | PerformanceLevel |

# Appendix B: Omitted Fields

The following fields exist in the cross-referenced physical formats but have not been included in the data model. In many cases, the data is redundant with other fields. In other cases, they have been omitted because the fields have been inherited from previous projects but are not relevant to the Smarter Balanced test administration.

## Fields in Test Results Transmission Format (TRT) but not in the data model

- Test/bankKey
- Test/handScoreProject (optional)
- Test/contract (optional)
- Examinee/key (optional)
- Examinee/isDemo (optional)
- ExamineeAttribute/Context
- ExamineeAttribute/ContextDate
- ExamineeRelationship/entityKey
- ExamineeRelationship/Context
- ExamineeRelationship/ContextDate
- Opportunity/TAName
- Accommodation/type
- Accommodation/value (code is the required indicator)
- Accommodation/segment (Smarter Balanced doesn't differentiate accommodations by segment)
- Score/measureLabel
- GenericVariable
- Item/clientId (optional)
- Item/scoreStatus
- Item/strand
- Item/contentLevel
- Item/pageNumber
- Item/pageVisits
- Item/pageTime
- Response/date (redundant with Item/adminDate)
- ScoreInfo
- SubScoreList
- Comment
- Score/conditionCode
- Score/type
- Score/userFirstName
- Score/userLastName
- ToolUsage
- ToolPage

## Fields in Data Warehouse Student Assessment (DWSA) but not in the data model

- Group1Text to Group 10Text
- AssessmentSessionLocation
- AssessmentAdministrationFinishDate

## Fields in Data Warehouse Item Level (DWIL) but not in the data model

- clientId
- scoreStatus
- strand
- contentLevel
- pageNumber
- pageVisits
- pageTime

## Fields in American Institutes for Research CSV (AIR) but not in data model

- AssessmentSubtestResultDateCreated (Optional)
- GradeLevelWhenReported
- LanguageCode (Optional)
- TestMonitorEmailAddress (Optional)
- Num_Itms_TOT (Optional)
- AttemptednessIndicator Y=Attempted, N-Non-Participant, P=Participant
- Label_SRC1 (Optional)
- Num_Itms_SRC1 (Optional)
- Label_SRC2 (Optional)
- Num_Itms_SRC2 (Optional)
- Label_SRC3 (Optional)
- Num_Itms_SRC3 (Optional)
- Label_SRC4 (Optional)
- Num_Itms_SRC4 (Optional)
- Label_SRC5 (Optional)
- Num_Itms_SRC5 (Optional)
- THETA_SRC5 (Optional)
- SEM_THETA_SRC5 (Optional)
- SS_SRC5 (Optional)
- SEM_SRC5 (Optional)
- PL_SRC5 (Optional)
- Label_SRC6 (Optional)
- Num_Itms_SRC6 (Optional)
- THETA_SRC6 (Optional)
- SEM_THETA_SRC6 (Optional)
- SS_SRC6 (Optional)
- SEM_SRC6 (Optional)
- PL_SRC6 (Optional)
- Accommodations_Segment1 (Optional)
- SegmentID2 (Optional)
- Accommodations_Segment2 (Optional)
- SegmentID3 (Optional)
- Accommodations_Segment3 (Optional)
- AssessmentFormNumber (Optional)
- Scr_Rater1 (Optional) (Scores from each rater)
- Scr_Rater2 (Optional)
- Scr_Rater3 (Optional)
- CC_Rater1 (Optional) (Condition Code)
- CC_Rater2 (Optional)
- CC_Rater3 (Optional)
- CC_Reso (Optional)