Smarter Balanced Item and Stimulus Metadata Specification

**Draft 30 September 2014**

Table . Revision History

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| --- | --- | --- |
| Description | Author/Modifier | Date |
| 1. Initial draft, based on collaboration Smartsheet, which contained information copied from AIR’s 7/23/14 draft metadata spec and ETS’s Field Test metadata fields | Byron Sartain, Kevin King | September 16, 2014 |
| 2. Editorial Review | Marty McCall |  |
| 3. Editorial Review | Brandt Redd | September 23, 2014 |
| 4. Revision based on initial staff editorial review | Byron Sartain, Kevin King |  |
| 6. Review at AIR | David Lopez de Quintana |  |
| 7. Final Revision | Byron Sartain, Kevin King |  |
| Approval by Lead Psychometrician | Marty McCall |  |
| Approval by Chief Technology Officer | Brandt Redd |  |

# Background

The purpose of this document is to provide an item and stimulus metadata specification that will be used for SmarterApp items. This specification represents the combined work of Smarter Balanced and various vendors working on related contracts. At the end of July 2014, WestEd—the project management partner (PMP) for Smarter Balanced—organized a comprehensive metadata review effort involving the Lead Psychometrician, the Chief Technology Officer, and staff from AIR, ETS, and CTB/McGraw-Hill. These initial collaboration meetings were followed by sessions involving Smarter Balanced staff and PMP for detailed discussion of metadata fields. Questions were directed to contractors as necessary throughout the process. This document resulted from those meetings and inquiries, culminating in CTO and Chief Psychometrician review and confirmation of these specified metadata fields.

# Metadata Fields

The fields in the table below adhere to the following guidelines:

* **Case sensitivity**: Field names are case sensitive
* **Order sensitivity**: Fields are not order-sensitive
* **Optional fields**: By default, optional fields do not need to be included in the metadata file. A missing optional field is simply treated as not present or not applicable. Optional fields are specified with a “no” in the “Required” column.
* **Field Numbers**:The field numbers in the first column are for convenience in referencing this version of this specification. They are arbitrary and could be changed or eliminated in future versions of the spec.

Table . Metadata Fields

| Field No. | Field | Description | Example | Reference | Data Type | Max. Width | Allowable Values | Required | Cardinality | Value Range |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 001 | Identifier | A system-independent identifier, which is the primary, unique identifier of this item, preferably a UUID. | f5aec190-9359-11e3-baa8-0800200c9a66 | Derived from http://ltsc.ieee.org/wg12/files/LOM\_1484\_12\_1\_v1\_Final\_Draft.pdf LOM:1.1:General.Identifier. | xsd:token | 40 | Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | Yes | 1 |  |
| 002 | Variant | Indicates that this item is a variant of other items with the same ID value. Variants include translations into different languages (e.g. English and Spanish) and renditions into different formats (e.g. SAAIF, QTI, ARI). | en  3 |  | xsd:token | 40 |  | No | 0..1 |  |
| 003 | Version | Reflects the version of the item as created by the authoring application. Item authoring application versioning rules are beyond the scope of this document. | 4.2 alpha | http://ltsc.ieee.org/wg12/files/LOM\_1484\_12\_1\_v1\_Final\_Draft.pdf LOM:2.1:Lifecycle.Version | xsd:token | 30 | <one or more printable ASCII character> | Yes | 1 |  |
| 009 | Subject | Subject name. The current SmarterApp items all have subjects {MATH, ELA, StudentHelp). However, items of any subjects can be authored. | ELA |  | xsd:token | 30 | <one or more printable ASCII character> | Yes | 1 |  |
| 010 | Status | This metadata will correspond to a value that represents the item lifecycle. | Developing | Derived from http://ltsc.ieee.org/wg12/files/LOM\_1484\_12\_1\_v1\_Final\_Draft.pdf LOM:2.2 Lifecycle.status | xsd:token | 30 | Developing Active/Operational Field Test Embedded Field Test Field Tested Pilot Equating Released Ready for Operational Ready for Field Test Ready for Pilot Test Pilot Tested Ready for Field Review Field Reviewed Operational Equating Rejected | No | 1 |  |
| 012 | Keyword | Comma-separated list of arbitrary keywords used for indexing searches | ("en","finance,economics,18th century") | Derived from http://ltsc.ieee.org/wg12/files/LOM\_1484\_12\_1\_v1\_Final\_Draft.pdf LOM:1.5 General.keyword | xsd:token | 30 | <one or more printable ASCII character> | No | [0..n] |  |
| 017 | BrailleType | Which Braille files to create. BRF=Braille Ready Format. PRN=printer file | PRN |  | xsd:token | 15 | BRF, PRN, Not Braillable | No | 1 |  |
| 018 | EnemyItem | The UUID of an item that cannot be administered with this item. Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | 83d4c2b0-99a1-11e3-a5e2-0800200c9a66 |  | xsd:token | 40 | <item identifier> | No | [0..n] |  |
| 020 | PtWritingType | A description of the purpose of writing performance task (applies to writing performance tasks only) | Informative |  | xsd:token | 15 | Explanatory, Opinion, Informative, Argumentative, Narrative | No | 1 |  |
| 023 | ItemAuthorIdentifier | A text string identifying the original item author or authors. It can be of any format including Firstname Lastname or any other identifying string. | Jonathan Smith |  | xsd:token | 100 | <one or more printable ASCII character> | No | [0..n] |  |
| 024 | LastModifiedBy | A text string identifying the person who last modified the item. It can be of any format including Firstname Lastname or any other identifying string. | Andrea Davidson |  | xsd:token | 100 | <one or more printable ASCII character> | No | [0..n] |  |
| 025 | SufficientEvidenceOfClaim | Explains how what the student does proves they have the skills and knowledge expressed in the claim and target. | This item shows that students can produce effective writing for a range of purposes and audiences. |  | xsd:token | 300 | <one or more printable ASCII character> | No | [0..n] |  |
| 029 | MathematicalPractice | Specify the mathematical practices (1-8) associated with the item/task. The eight mathematical practices correspond to the following list: 1. Make sense of problems and persevere in solving them. 2. Reason abstractly and quantitatively. 3. Construct viable arguments and critique the reasoning of others. 4. Model with mathematics. 5. Use appropriate tools strategically. 6. Attend to precision. 7. Look for and make use of structure. 8. Look for and express regularity in repeated reasoning. None: If none of the above apply | 5 |  | xsd:token | 4 | 1,2,3,4,5,6,7,8,None | No | [0..n] |  |
| 030 | Notes | Notes that may aid in understanding the purpose of this item. For TE items, include the TE template name here. One entry per language. | ("en","This is an annotation") |  | xsd:token | 300 | ("en","<one or more printable ASCII character>") | No | [0..n] |  |
| 032 | StimulusType | Type of stimulus | audio |  | xsd:token | 16 | Text, Audio, Audiovisual, Chart, Graph, Picture/Graphic, Table, N/A | No | 1 |  |
| 033 | StimulusName | Title of the stimulus passage | Bugs are the Best |  | xsd:token | 50 | <one or more printable ASCII character> | No | 1 |  |
| 034 | StimulusSource | Specify any stimulus material used and/or source required for factual information. All sources must be reliable and reproducible. If none, leave blank. | http://quickfacts.census.gov/qfd/states/06000.html |  | xsd:token | 150 | <one or more printable ASCII character> | No | 1 |  |
| 035 | StimulusGenre | Describes the nature of the stimulus | Informational Text |  | xsd:token | 20 | Literary Text, Listening, Informational Text, Video | No | 1 |  |
| 036 | StimulusLength | description, related to number of items supported by the stimulus Long = 18-20 items Short = 9-10 items | Long |  | xsd:token | 6 | Long, Short, Medium | No | 1 |  |
| 037 | AssociatedTutorial | UUID or reference to associated tutorial resource. Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | 4a50ffd0-a53c-11e3-a5e2-0800200c9a66 |  | xsd:token | 40 | Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | No | 1 |  |
| 038 | AssociatedWordlist | UUID or reference to associated wordlist (glossary) resource. Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | 35320c20-a53c-11e3-a5e2-0800200c9a66 |  | xsd:token | 40 | Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | No | 1 |  |
| 039 | PrimaryStandard | Enter the number(s) of the CCSS standard(s). Includes Content Standards Publication key:Standards Key. This can be any level of the hierarchy contained in the standards publication | SBAC-ELA-V1:4-CR|6-8|8-L-1b. |  | xsd:token | 40 | <Standards publication>:<standards key> | No | 1 |  |
| 040 | SecondaryStandard | Enter the number(s) of the CCSS standard(s). Includes Content Standards Publication key:Standards Key. This can be any level of the hierarchy contained in the standards publication | SBAC-MA-V1:1|MD|J-4|a/s| |  | xsd:token | 40 | <Standards publication>:<standards key> | No | [0..n] |  |
| 042 | ScorePoints | A comma-separated list of all possible scores for the item 1-point item: "0,1" 2-point item: "0,1,2" 3-point item: "0,1,2,3" 4-point item: "0,1,2,3,4" 5-point item: "0,1,2,3,4,5" 6-point item: "0,1,2,3,4,5,6" NA is used for stimuli and for wordlsts and tutorial items. | 0,1,2 |  | xsd:token | 100 | "0,1" "0,1,2" "0,1,2,3" "0,1,2,3,4" "0,1,2,3,4,5" "0,1,2,3,4,5,6" NA <Comma-separated list of integer values greater than or equal to zero> | No | [1..n] |  |
| 045 | StimulusGraphic | Does the stimulus contain a graphic? | Yes |  | xsd:boolean | 3 | Yes,No | No | 1 |  |
| 048 | DepthOfKnowledge | Depth of Knowledge level of the item. NA is used for stimuli and for wordlsts and tutorial items; 1-4 for all other item types, representing the range from less complex (1) to most complex (4). | 3 |  | xsd:token | 2 | 1,2,3,4,NA | No | 1 |  |
| 052 | PresentationFormat | Format of item presentation. For example, Text, text with graphics, graphics, audio, simulation, animation, etc.. | audio |  | xsd:token | 19 | Audio Graphics only Animation Simulation Text Text with graphics Audiovisual | Yes | 1 |  |
| 053 | ResponseFormat | Format of the response | CR Essay | See "SmarterApp Assessment Item Format Specification (<http://www.smarterapp.org/specs/AssessmentItemFormat.html>)" | xsd:token | 30 | EBSR, eq, er, gi, htq, mc, mi, ms, nl, pass, sa, SIM, ti, tut, wer, wordlist | No | 1 |  |
| 056 | StimulusReadabilityFK | From stimulus placemat Flesch-Kincaid value | 30 | http://en.wikipedia.org/wiki/Flesch–Kincaid\_readability\_test | xsd:integer | 3 | FK = 0 to 100 | No | 1 |  |
| 057 | StimulusReadabilityLexile | From stimulus placemat Lexile value | 600 | http://www.lexile.com | xsd:integer | 4 | Lexile = integers 400-1200 | No | 1 |  |
| 066 | StimulusLiteraryNonFiction | Division of RL and RI. LNF = Literary Non Fiction, Sci = Science, SocSci = Social Science | LNF |  | xsd:token | 6 | LNF, Sci, SocSci | No | 1 |  |
| 067 | StimulusPerformanceTask | Stimulus for a PT | Yes |  | xsd:boolean | 3 | Yes, No | No | 1 |  |
| 069 | PerformanceTaskComponentItem | Part of a PT | Yes |  | xsd:boolean | 3 | Yes, No | No | 1 |  |
| 070 | PtSequence | Indicates the location of an item within a PT set. It will be populated for ELA PT Items. | 2 |  | xsd:integer | 1 | 1,2,3,4 | No | 1 |  |
| 071 | PtMetadataTypeOfWriting | Narrative, argumentative, informational (for stim and long essay only) | A |  | xsd:token | 1 | N, A , I | No | 1 |  |
| 072 | PtClassroomActivity | Associated classroom activity | Yes |  | xsd:token | 3 | Yes, No | No | 1 |  |
| 074 | AccessibilityTagsASLLanguage | Does the item have an ASL video associated with it? | Yes |  | xsd:boolean | 3 | Yes, No | No | 1 |  |
| 077 | AlgebraFunctionDescriptor | Algebra Function Descriptor: (1) Linear (2) Exponential (3) Quadratic (4) Polynomial (5) Rational (6) Radical (7) Absolute Value (8) Logarithmic (9) Trigonometric (10) Step (11) Piecewise (12) Square root (13) Cube root | 9 |  | xsd:integer | 2 | 1,2,3,4,5,6,7,8,9,10,11,12,13 | No | [0..n] |  |
| IRT Fields | | | | | | | | | | |
| IRT\_A IRT a-parameter IRT\_Step4 IRT step value 4 for polytomous items  IRT\_A\_SE IRT a-parameter standard error IRT\_Step4\_SE IRT step value 4 standard error  IRT\_B IRT b-parameter IRT\_Step5 IRT step value 5 for polytomous items  IRT\_B\_SE IRT b-parameter standard error IRT\_Step5\_SE IRT step value 5 standard error  IRT\_C IRT c-parameter RT\_Step6 IRT step value 6 for polytomous items  IRT\_C\_SE IRT c-parameter standard error IRT\_Step6\_SE IRT step value 6 standard error  IRT\_Step1 IRT step value 1 for polytomous items IRT\_Step7 IRT step value 7 for polytomous items  IRT\_Step1\_SE IRT step value 1 standard error IRT\_Step7\_SE IRT step value 7 standard error  IRT\_Step2 IRT step value 2 for polytomous items IRT\_Step8 IRT step value 8 for polytomous items  IRT\_Step2\_SE IRT step value 2 standard error IRT\_Step8\_SE IRT step value 8 standard error  IRT\_Step3 IRT step value 3 for polytomous items IRT\_Fit1 Item fit statistics 1; G square  IRT\_Step3\_SE IRT step value 3 standard error IRT\_Fit2 Item fit statistics 2; Placeholder | | | | | | | | | | |
| 081 | IrtModelType | Define IRT (Item Response Theory) Model being used | IRT3pl | http://en.wikipedia.org/wiki/Item\_response\_theory | xsd:token | 7 | IRT3pl IRT3pln IRTGPC IRTPCL Raw | No | [0..n] |  |
| 082 | IrtWeight | IRT model weight. Precision of up to 16 decimal places. | 1 |  | xsd:double | 20 | <any non-negative double-precision floating point number> | No | [0..n] |  |
| 083 | IrtDimensionPurpose | Purpose of the current IRT dimension | Elocution |  | xsd:token | 30 | <one or more printable ASCII character> | No | [0..n] |  |
| 084 | IrtRecodeRule | IRT model recode rule |  |  | xsd:token | 20 | <one or more printable ASCII character> | No | [0..n] |  |
| 085 | IrtScore | IRT score per dimension (or recoded) | 5 |  | xsd:integer | 3 | 0...999 | No | [0..n] |  |
| 101 | Excluded\_from\_All\_Analysis | AIR and CTB indicated "Do not use" (DNU) or "Do not score" (DNS) items to not include in analysis for item issues related to test delivery and scoring. Value "Y" indicates that this item was not included in Field Test analyses. |  |  | Character |  |  |  |  |  |
| 102 | Excluded\_from\_IRT\_Analysis | The item was excluded from IRT analyses as a result of being rejected at content data review or causing program convergence issues. Value "Y" indicates that this item was not included in IRT analyses. |  |  | Character |  |  |  |  |  |
| 105 | Student\_Grade | The student grade from which the item statistics were obtained. When an item is used in multiple grades, this field indicates the grade of the students who took the item, regardless of the grade for which the item was intended. |  |  | Numeric |  |  |  |  |  |
| 107 | Sample\_Size | The number of students included to calculate this set of item statistics |  |  | Numeric |  |  |  |  |  |
| 122 | Percent\_ChoosingA | Percentage of students selecting MC item option A |  |  | Numeric |  |  |  |  |  |
| 123 | Percent\_ChoosingB | Percentage of students selecting MC item option B |  |  | Numeric |  |  |  |  |  |
| 124 | Percent\_ChoosingC | Percentage of students selecting MC item option C |  |  | Numeric |  |  |  |  |  |
| 125 | Percent\_ChoosingD | Percentage of students selecting MC item option D |  |  | Numeric |  |  |  |  |  |
| 126 | Percent\_ChoosingE | Percentage of students selecting MC item option E |  |  | Numeric |  |  |  |  |  |
| 127 | Percent\_ChoosingF | Percentage of students selecting MC item option F |  |  | Numeric |  |  |  |  |  |
| 128 | Percent\_ChoosingG | Percentage of students selecting MC item option G |  |  | Numeric |  |  |  |  |  |
| 129 | Percent\_Obtaining\_0 | Percentage of students obtaining score 0 |  |  | Numeric |  |  |  |  |  |
| 130 | Percent\_Obtaining\_1 | Percentage of students obtaining score 1 |  |  | Numeric |  |  |  |  |  |
| 131 | Percent\_Obtaining\_2 | Percentage of students obtaining score 2 |  |  | Numeric |  |  |  |  |  |
| 132 | Percent\_Obtaining\_3 | Percentage of students obtaining score 3 |  |  | Numeric |  |  |  |  |  |
| 133 | Percent\_Obtaining\_4 | Percentage of students obtaining score 4 |  |  | Numeric |  |  |  |  |  |
| 134 | Percent\_Obtaining\_5 | Percentage of students obtaining score 5 |  |  | Numeric |  |  |  |  |  |
| 135 | Percent\_Obtaining\_6 | Percentage of students obtaining score 6 |  |  | Numeric |  |  |  |  |  |
| 136 | Percent\_Obtaining\_7 | Percentage of students obtaining score 7 |  |  | Numeric |  |  |  |  |  |
| 137 | Percent\_Obtaining\_8 | Percentage of students obtaining score 8 |  |  | Numeric |  |  |  |  |  |
| 138 | Biserial\_OptionA | Biserial for MC item option A |  |  | Numeric |  |  |  |  |  |
| 139 | Biserial\_OptionB | Biserial for MC item option B |  |  | Numeric |  |  |  |  |  |
| 140 | Biserial\_OptionC | Biserial for MC item option C |  |  | Numeric |  |  |  |  |  |
| 141 | Biserial\_OptionD | Biserial for MC item option D |  |  | Numeric |  |  |  |  |  |
| 142 | Biserial\_OptionE | Biserial for MC item option E |  |  | Numeric |  |  |  |  |  |
| 143 | Biserial\_OptionF | Biserial for MC item option F |  |  | Numeric |  |  |  |  |  |
| 144 | Biserial\_OptionG | Biserial for MC item option G |  |  | Numeric |  |  |  |  |  |
| 145 | Item\_Total\_Pearson\_Correlation | Point-biserial for dichotomous items and point-polyserial for polytomous items. The total/criterion score in the LOFT-delivered Field Test is the average AIS of all items taken by a student. |  |  | Numeric |  |  |  |  |  |
| 146 | Pt\_biserial\_OptionA | Point-biserial for MC item option A |  |  | Numeric |  |  |  |  |  |
| 147 | Pt\_biserial\_OptionB | Point-biserial for MC item option B |  |  | Numeric |  |  |  |  |  |
| 148 | Pt\_biserial\_OptionC | Point-biserial for MC item option C |  |  | Numeric |  |  |  |  |  |
| 149 | Pt\_biserial\_OptionD | Point-biserial for MC item option D |  |  | Numeric |  |  |  |  |  |
| 150 | Pt\_biserial\_OptionE | Point-biserial for MC item option E |  |  | Numeric |  |  |  |  |  |
| 151 | Pt\_biserial\_OptionF | Point-biserial for MC item option F |  |  | Numeric |  |  |  |  |  |
| 152 | Pt\_biserial\_OptionG | Point-biserial for MC item option G |  |  | Numeric |  |  |  |  |  |
| 153 | N\_ChoosingA | Number of students choosing MC item option A |  |  | Numeric |  |  |  |  |  |
| 154 | MeanCritScore\_OptionA | Mean criterion score of those students choosing option A |  |  | Numeric |  |  |  |  |  |
| 155 | N\_choosingB | Number of students choosing MC item option B |  |  | Numeric |  |  |  |  |  |
| 156 | MeanCritScore\_OptionB | Mean criterion score of those students choosing option B |  |  | Numeric |  |  |  |  |  |
| 157 | N\_ChoosingC | Number of students choosing MC item option C |  |  | Numeric |  |  |  |  |  |
| 158 | MeanCritScore\_OptionC | Mean criterion score of those students choosing option C |  |  | Numeric |  |  |  |  |  |
| 159 | N\_ChoosingD | Number of students choosing MC item option D |  |  | Numeric |  |  |  |  |  |
| 160 | MeanCritScore\_OptionD | Mean criterion score of those students choosing option D |  |  | Numeric |  |  |  |  |  |
| 161 | N\_ChoosingE | Number of students choosing MC item option E |  |  | Numeric |  |  |  |  |  |
| 162 | MeanCritScore\_OptionE | Mean criterion score of those students choosing option E |  |  | Numeric |  |  |  |  |  |
| 163 | N\_ChoosingF | Number of students choosing MC item option F |  |  | Numeric |  |  |  |  |  |
| 164 | MeanCritScore\_OptionF | Mean criterion score of those students choosing option F |  |  | Numeric |  |  |  |  |  |
| 165 | N\_ChoosingG | Number of students choosing MC item option G |  |  | Numeric |  |  |  |  |  |
| 166 | MeanCritScore\_OptionG | Mean criterion score of those students choosing option G |  |  | Numeric |  |  |  |  |  |
| 167 | N\_Omitting | Number of students omitting the item |  |  | Numeric |  |  |  |  |  |
| 168 | MeanCritScore\_Omit | Mean criterion score of those that omitted the item |  |  | Numeric |  |  |  |  |  |
| 169 | N\_Reached | Number of students reaching the item |  |  | Numeric |  |  |  |  |  |
| 170 | MeanCritScore\_Reached | Mean criterion score of those that reached the item |  |  | Numeric |  |  |  |  |  |
| 171 | N\_Cat\_0 | Number of students obtaining the score of 0 |  |  | Numeric |  |  |  |  |  |
| 172 | MeanCritScore\_Cat\_0 | Mean criterion score of those testers at score category 0 |  |  | Numeric |  |  |  |  |  |
| 173 | N\_Cat\_1 | Number of students obtaining the score of 1 |  |  | Numeric |  |  |  |  |  |
| 174 | MeanCritScore\_Cat\_1 | Mean criterion score of those testers at score category 1 |  |  | Numeric |  |  |  |  |  |
| 175 | N\_Cat\_2 | Number of students obtaining the score of 2 |  |  | Numeric |  |  |  |  |  |
| 176 | MeanCritScore\_Cat\_2 | Mean criterion score of those testers at score category 2 |  |  | Numeric |  |  |  |  |  |
| 177 | N\_Cat\_3 | Number of students obtaining the score of 3 |  |  | Numeric |  |  |  |  |  |
| 178 | MeanCritScore\_Cat\_3 | Mean criterion score of those testers at score category 3 |  |  | Numeric |  |  |  |  |  |
| 179 | N\_Cat\_4 | Number of students obtaining the score of 4 |  |  | Numeric |  |  |  |  |  |
| 180 | MeanCritScore\_Cat\_4 | Mean criterion score of those testers at score category 4 |  |  | Numeric |  |  |  |  |  |
| 181 | N\_Cat\_5 | Number of students obtaining the score of 5 |  |  | Numeric |  |  |  |  |  |
| 182 | MeanCritScore\_Cat\_5 | Mean criterion score of those testers at score category 5 |  |  | Numeric |  |  |  |  |  |
| 183 | N\_Cat\_6 | Number of students obtaining the score of 6 |  |  | Numeric |  |  |  |  |  |
| 184 | MeanCritScore\_Cat\_6 | Mean criterion score of those testers at score category 6 |  |  | Numeric |  |  |  |  |  |
| 185 | N\_Cat\_7 | Number of students obtaining the score of 7 |  |  | Numeric |  |  |  |  |  |
| 186 | MeanCritScore\_Cat\_7 | Mean criterion score of those testers at score category 7 |  |  | Numeric |  |  |  |  |  |
| 187 | N\_Cat\_8 | Number of students obtaining the score of 8 |  |  | Numeric |  |  |  |  |  |
| 188 | MeanCritScore\_Cat\_8 | Mean criterion score of those testers at score category 8 |  |  | Numeric |  |  |  |  |  |
| 189 | DIFCat\_Female\_v\_Male | Female vs. Male DIF category; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 190 | DIFCat\_Asian\_v\_White | Asian vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 191 | DIFCat\_Black\_v\_White | Black vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 192 | DIFCat\_Hispanic\_v\_White | Hispanic vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 193 | DIFCat\_NativeA\_v\_White | Native American vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 194 | DIFCat\_IEP\_v\_NonIEP | IEP students vs. non IEP students; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 195 | DIFCat\_LEP\_v\_NonLEP | LEP students vs. non LEP students; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 196 | DIFCat\_Title1\_v\_NonTitle1 | Title 1 eligible students vs. non eligible students; B+, B-, C+, C- |  |  | Character |  |  |  |  |  |
| 197 | N\_Male | Number of male students |  |  | Numeric |  |  |  |  |  |
| 198 | N\_Female | Number of female students |  |  | Numeric |  |  |  |  |  |
| 199 | N\_White | Number of white students |  |  | Numeric |  |  |  |  |  |
| 200 | N\_Asian | Number of Asian students |  |  | Numeric |  |  |  |  |  |
| 201 | N\_Black | Number of black students |  |  | Numeric |  |  |  |  |  |
| 202 | N\_Hispanic | Number of Hispanic students |  |  | Numeric |  |  |  |  |  |
| 203 | N\_NativeAmerican | Number of native American students |  |  | Numeric |  |  |  |  |  |
| 204 | N\_IEP | Number of IEP students |  |  | Numeric |  |  |  |  |  |
| 205 | N\_LEP | Number of LEP students |  |  | Numeric |  |  |  |  |  |
| 206 | N\_Title1 | Number of Title 1 eligible students |  |  | Numeric |  |  |  |  |  |
| 207 | MHDDIF\_F\_M | The MH-D-DIF from the comparison of Female vs. Male students. |  |  | Numeric |  |  |  |  |  |
| 208 | SMD\_F\_M | Standardized mean differences from the comparison of Female vs. Male students. |  |  | Numeric |  |  |  |  |  |
| 209 | MHDDIF\_Asian\_White | The MH-D-DIF from the comparison of Asian vs. White students. |  |  | Numeric |  |  |  |  |  |
| 210 | SMD\_Asian\_White | Standardized mean differences from the comparison of Asian vs. White students. |  |  | Numeric |  |  |  |  |  |
| 211 | MHDDIF\_Black\_White | The MH-D-DIF from the comparison of Black vs. White students. |  |  | Numeric |  |  |  |  |  |
| 212 | SMD\_Black\_White | Standardized mean differences from the comparison of Black vs. White students. |  |  | Numeric |  |  |  |  |  |
| 213 | MHDDIF\_Hispanic\_White | The MH-D-DIF from the comparison of Hispanic vs. White students. |  |  | Numeric |  |  |  |  |  |
| 214 | SMD\_Hispanic\_White | Standardized mean differences from the comparison of Hispanic vs. White students. |  |  | Numeric |  |  |  |  |  |
| 215 | MHDDIF\_NativeA\_White | The MH-D-DIF from the comparison of Native American vs. White students. |  |  | Numeric |  |  |  |  |  |
| 216 | SMD\_NativeA\_White | Standardized mean differences from the comparison of Native American vs. White students. |  |  | Numeric |  |  |  |  |  |
| 217 | MHDDIF\_IEP\_NonIEP | The MH-D-DIF from the comparison of students in Individualized Education Program (IEP) vs. non IEP students. |  |  | Numeric |  |  |  |  |  |
| 218 | SMD\_IEP\_NonIEP | Standardized mean differences from the comparison of IEP vs. non IEP students. |  |  | Numeric |  |  |  |  |  |
| 219 | MHDDIF\_LEP\_NonLEP | The MH-D-DIF from the comparison of students with Limited English Proficiency (LEP) vs. non LEP students. |  |  | Numeric |  |  |  |  |  |
| 220 | SMD\_LEP\_NonLEP | Standardized mean differences from the comparison of LEP vs. non LEP students. |  |  | Numeric |  |  |  |  |  |
| 221 | MHDDIF\_Title1\_NonTitle1 | The MH-D-DIF from the comparison of students who are eligible or not eligible for Title 1. |  |  | Numeric |  |  |  |  |  |
| 222 | SMD\_Title1\_NonTitle1 | Standardized mean differences from the comparison of students who are eligible or not eligible for Title 1. |  |  | Numeric |  |  |  |  |  |
| Changes Pending | | | | | | | | | | |
| 011 | Language | Supported language(s) for this item. Each code consists of a lower-case 3-character representation of the language name, as defined by the ISO-639-2 standard. An optional extension of -Braille may be appended. This field does not apply to Wordlists or Tutorials. This field can be repeated to accommodate multiple languages. | eng | http://www.loc.gov/standards/iso639-2/php/English\_list.php | xsd:token | 11 | <3-letter ISO-639-2 code for the language name> plus an optional extension of -Braille | No | [1..n] |  |
| 026 | Claim2Category | REVISED: Applies to ELA writing sub-claim scores, type of Claim 2 item: (O)rganization, (E)vidence/Elaboration, (C)onventions. | E |  | xsd:token | 1 | O, E, C | No | 1 |  |
| 027 | Claim2RevisionCategory | Applies to ELA writing sub-claim scores. BW=Brief Write R=Revision | R |  | xsd:token | 2 | BW,R | No | 1 |  |
| 028 | AllowCalculator | Is calculator use allowed by Smarter Calculator policy? Only applicable to Math items. | Yes |  | xsd:boolean | 3 | required, permitted, prohibited | No | 1 |  |
| 044 | EvidenceStatement | Indicates the evidence that could be observed in order to know the student met the target. | This item requires the student to identify a central idea in the text and support it with relevant details. |  | xsd:token | 300 | <one or more printable ASCII character> | Yes | [0..n] |  |
| 049 | EligibleAssessmentType | Assessment type for which this item is targeted. The field accommodates multiple values. | summative |  | xsd:token | 13 | summative, interim | No | [0..n] |  |
| 051 | SpecificationsVersion | Smarter Balanced Item Specification year, e.g. 2012 version, 2013 revised version | 2013 |  | xsd:integer | 4 | <any four-digit integer> | No | 1 | 2012–n |
| 054 | ScoringMethod | Scoring method; field accommodates multiple values. | HandScored |  | xsd:token | 40 | Automatic with (keys) Automatic with key Automatic with machine rubric Automatic, graphic, response scoring Hand scored | No | 1 |  |
| 058 | StimulusLiteraryMeaning | Qualitative Readability Rating of the complexity of meaning(s) in a literary passage. | Very |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 059 | StimulusLiteraryTextStructure | Qualitative Readability Rating of the organizational structure's complexity in a literary passage, accounting also for any organizational clarification that accompanying images provide. | Moderately |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 060 | StimulusLiteraryLangFeatures | Qualitative Readability Rating of the complexity of Language Usage in a literary passage. | Exceedingly |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 061 | StimulusLiteraryKnowledgeDemands | Qualitative Readability Rating of the complexity of a literary passage on account of life experiences, intertextuality, and cultural knowledge. | Very |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 062 | StimulusInfoPurpose | Qualitative readability rating of the complexity involved in interpreting an informational passage's purpose. | Very |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 063 | StimulusInfoTextStructure | Qualitative Readability Rating of the organizational structure's complexity in an informational passage, accounting also for any organizational clarification that accompanying images provide. | Slightly |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 064 | StimulusInfoLanguageFeatures | Qualitative Readability Rating of the complexity of Language Usage in an informational passage. | Exceedingly |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 065 | StimulusInfoKnowledgeDemands | Qualitative Readability Rating of the complexity of an informational passage on account of life experiences, intertextuality, and cultural knowledge, and/or subject matter knowledge. | Very |  | xsd:token | 11 | Exceedingly, Very, Moderately, Slightly | No | 1 |  |
| 075a | ELAContentTaskModel | The item specifications list allowable task models for each claim and target. We use these to identify the task models (e.g., for Claim 3 Target 4 items, the task model for MC items is 1.) | 1 |  | xsd:integer | 3 | 1...999 | No | 1 |  |
| 075b | MathContentTaskModel | The item specifications list allowable task models for each claim and target. We use these to identify the task models (e.g., for Claim 3 Target 4 items, the task model for MC items is 1.) | 1 |  | xsd:integer | 3 | 1...999 | No | 1 |  |
| 076 | MathSubTaskModel | The item specifications list allowable task models for each claim and target. We use these to identify the task models (e.g., for Claim 3 Target 4 items, the task model for MC items is 1.) Used only for Math | 1 |  | xsd:integer | 3 | 1...999 | No | 1 |  |
| 100a | WER\_ItemSubItemA | The A dimension (organization) of the ELA PT WER items |  |  | Character |  |  |  |  |  |
| 100b | WER\_ItemSubItemB | The B dimension (evidence/elaboration) of the ELA PT WER items. |  |  | Character |  |  |  |  |  |
| 100c | WER\_ItemSubItemC | The C dimension (convention) of the ELA PT WER items. |  |  | Character |  |  |  |  |  |
| 100d | WER\_ItemSubItemD | The up-rounded average of the A and B dimensions of the ELA PT WER items. |  |  | Character |  |  |  |  |  |
| 110 | StatFlagLowAvgItemScore | Item flags according to item statistics: A=Low Average Item Score (less than .10). |  |  | Character |  |  |  |  |  |
| 111 | StatFlagScoreCatLowN | Item flags according to item statistics: B=CR items with percentage obtaining any score category <3%. |  |  | Character |  |  |  |  |  |
| 112 | StatFlagHighStudLowScorePt | Item flags according to item statistics: C=CR items with higher criterion score mean for students in a lower score-point category. |  |  | Character |  |  |  |  |  |
| 113 | StatFlagHighAbilityPropChooseDistractor | Item flags according to item statistics: D=MC items with proportionally more higher ability students select a distractor over the key. |  |  | Character |  |  |  |  |  |
| 114 | StatFlagHighAbilityAvgChooseDistractor | Item flags according to item statistics: F=MC items with higher criterion score mean for students choosing a distractor than the mean for those choosing the key. |  |  | Character |  |  |  |  |  |
| 115 | StatFlagHighAvgItemScore | Item flags according to item statistics: H=High Average Item Score (greater than .95). |  |  | Character |  |  |  |  |  |
| 116 | StatFlagHighNotRespond | Item flags according to item statistics: N=High Percent of Not Responding (Omits + Not Reached). |  |  | Character |  |  |  |  |  |
| 117 | StatFlagHighOmits | Item flags according to item statistics: O=High Percent of Omits. |  |  | Character |  |  |  |  |  |
| 118 | StatFlagPosDistrBiserial | Item flags according to item statistics: P=MC items with positive distractor biserial correlation. |  |  | Character |  |  |  |  |  |
| 119 | StatFlagLowItemTtlCorr | Item flags according to item statistics: R=Low item-total correlation (less than .30). |  |  | Character |  |  |  |  |  |
| 120 | StatFlagSmallerAISatHigherGrade | Item flags according to item statistics: V=Smaller AIS at a higher grade level. Z-Flagged by statisticians as an additional item that needs content review. |  |  | Character |  |  |  |  |  |
| 121 | StatFlagNeedContentRvw | Z=Flagged by statisticians as an additional item that needs content review. |  |  | Character |  |  |  |  |  |
| 301 | Claim | Claim item is associated with |  |  | Numeric |  | 1,2,3,4 | Yes |  |  |
| 302 | Target | Target item is associated with |  |  | Character |  | Math: A-Z; ELA:1-99 | Yes |  |  |
| 303 | Minimum points scored | Lowest score category used in statistical analysis-usually zero |  |  | Numeric |  | Integer |  |  |  |
| 304 | PT ID | Unique ID of performance task item is associated with |  |  | Numeric |  | Integer |  |  |  |
| 305 | PT version | Version of PT used with this item for this data collection |  |  | Numeric |  | Integer |  |  |  |
| 306 | PT Classroom Activity ID | Classroom activity associated with this PT |  |  | Numeric |  | Integer |  |  |  |
| 307 | Stimulus version | Version of stimulus used with this item for this data collection |  |  | Numeric |  | Integer |  |  |  |
| 308 | BrailleStandard | (partner tag to BrailleType) |  |  |  |  | contracted, uncontracted |  |  |  |
| 309 | ElfQuantitative | Easy Listening Formula; a quantitative listenability rating calculated by counting the number of syllables (above one) for each word. Figure indicates grade level associated with the calculated ratio. |  | ELA and Literacy Stimulus Specifications |  |  |  | No |  |  |
| 310 | StimulusListeningPurpose | Qualitative Listenability Rating of the auditory complexity of a passage based on purpose, audience, and presentation. |  | ELA and Literacy Stimulus Specifications |  |  | low, medium, high | No |  |  |
| 311 | StimulusListeningAuditoryStructure | Qualitative Listenability Rating of the auditory complexity of a passage based on organization and sound variety. |  | ELA and Literacy Stimulus Specifications |  |  | low, medium, high | No |  |  |
| 312 | StimulusListeningOralLangFeatures | Qualitative Listenability Rating of the auditory complexity of a passage based on conventionality of language, vocabulary, and delivery. |  | ELA and Literacy Stimulus Specifications |  |  | low, medium, high | No |  |  |
| 313 | StimulusListeningKnowledgeDemands | Qualitative Listenability Rating of the auditory complexity of a passage based on subject matter knowledge required, allusions/reference, and the use of images. |  | ELA and Literacy Stimulus Specifications |  |  | low, medium, high | No |  |  |
| 314 | LicensedWorkStandardNumber | The ISBN or ISSN of the licensed work. |  |  |  |  |  | No |  |  |
| 315 | LicensedWorkTitle | Title of the work or publication. For periodicals it is the title of the periodical, not of the article. |  |  |  |  |  | No |  |  |
| 316 | LicensedWorkArticleTitle | Title of the article in a periodical (if applicable) |  |  |  |  |  | No |  |  |
| 317 | LicensedWorkAuthor | Author of the licensed work. |  |  |  |  |  | No |  |  |
| 318 | LicensedWorkPublisher | Publisher of the licensed work. |  |  |  |  |  | No |  |  |
| 319 | LicensedWorkDate | Publication date of the licensed work. |  |  |  |  |  | No |  |  |
| 320 | LicensedWorkLocation | Location of the publisher of the licensed work (from the copyright page or masthead). |  |  |  |  |  | No |  |  |
| 321 | LicensedWorkVolNum | Volume/Number/Series (if applicable). E.g. “Volume 3 Number 5” |  |  |  |  |  | No |  |  |
| 322 | LicensedWorkCccId | The CCC ID Number (if available) |  |  |  |  |  | No |  |  |
|  | Resolution Still Required | | | | | | | | | |
| 005 | AlternateIdentifier | Alternate identifier for this item from other systems. When a new identifier is created for this item, the existing value in the "identifier" field is added as another instance of AlternateIdentifier. | 28716 |  | xsd:token | 40 | System-specific unique identifier. Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | No | [0..n] |  |
| 013 | SecurityStatus | Indicates the secure status of the item. The item is considered secure through field testing, as summative use. The item is considered non-secure for release and interim use purposes. | Secure |  | xsd:token | 20 | Secure, Non-secure | Yes | 1 |  |
| 097 | Administration | Spring 2014 Field Test |  |  | Character |  |  | No |  |  |
| 031a | AssociatedStimulus | A UUID of an associated stimulus. Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | 41d7ec7b-2ed7-4b7b-96dc-9c1d9ada6891 |  | xsd:token | 40 | A unique identifier for the associated stimulus. Preferably, a universally unique identifier. Due to system variations, may contain a unique identifier that is not a UUID. | No | [0..n] |  |
| 015 | IntendedGrade | Lowest grade pool in which the item can be included. Leading zero required for grades 1-9.  IT - Infant/toddler PR - Preschool PK - Prekindergarten TK - Transitional Kindergarten KG - Kindergarten PS - Postsecondary UG - Ungraded NA - Not Applicable, used for resources only | 4 | Values can be referenced here: https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=5100 However there is no CEDS equivalent for these item-related grade levels | xsd:token | 2 | IT, PR, PK, TK, KG, 01, 02, 03, 04, 05, 06, 07, 08, 09, 10, 11, 12, 13, PS, UG, NA | Yes | 1 |  |
| 055 | AchievementQuintile | Quintiles, from 1 (low) to 5 (high) | 2 |  | xsd:integer | 1 | 1, 2, 3, 4, 5 | No | 1 |  |
| 007 | InteractionType | QTI Interaction type. Allowable value definitions: (Refer to CEDS standard definition at https://ceds.ed.gov/cedselementdetails.aspx?termid=6117 for details on the QTI interaction types listed in Allowable Values). Additionally, the following definitions from Reference [2] apply: EBSR: Evidence Based Selected Response EQ: Equation ER: Extended Response GI: Grid HT: Hot Text HTQ: Hot Text (QTI) MC: Multiple Choice MI: Match Interaction MS: Multi-Select NL: Natural Language SA: Short Answer TI: Table Interaction TUT: Tutorial WER: Writing Extended Response WORDLIST: Wordlist (Glossary) Stimulus: Also known as Passage, a non-interactive "item" associated with one or more assessment items. | choiceInteraction | Derived from http://www.imsglobal.org/xsd/qti/qtiv2p1/imsqti\_metadata\_v2p1.xsd  QTI 2.1:interactionType,  https://ceds.ed.gov/cedselementdetails.aspx?termid=6117, and Reference [2]. | xsd:token | 30 | associateInteraction choiceInteraction customInteraction drawingInteraction endAttemptInteraction extendedTextInteraction gapMatchInteraction graphicAssociateInteraction graphicGapMatchInteraction graphicOrderInteraction hotspotInteraction hottextInteraction inlineChoiceInteraction matchInteraction mediaInteraction orderInteraction positionObjectInteraction selectPointInteraction sliderInteraction textEntryInteraction uploadInteraction EBSR EQ ER GI HT HTQ MC MI MS NL SA TI TUT WER WORDLIST Stimulus | Yes | 1 |  |
| 041 | MaximumNumberOfPoints | Maximum points. NA is used for stimuli and for wordlsts and tutorial items; 1-6 for all other item types. | 2 |  | xsd:token | 2 | 1,2,3,4,5,6,NA | No | 1 |  |
| 251 | Maximum points scored | Highest score category used in statistical analysis |  |  | Numeric |  | Integer |  |  |  |
| 014 | MinimumGrade | Lowest grade pool in which the item can be included. Leading zero required for grades 1-9.  IT - Infant/toddler PR - Preschool PK - Prekindergarten TK - Transitional Kindergarten KG - Kindergarten PS - Postsecondary UG - Ungraded NA - Not Applicable, used for resources only | 4 | Values can be referenced here: https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=5100 However there is no CEDS equivalent for these item-related grade levels | xsd:token | 2 | IT, PR, PK, TK, KG, 01, 02, 03, 04, 05, 06, 07, 08, 09,10, 11, 12, 13, PS, UG, NA | Yes | 1 |  |
| 016 | MaximumGrade | Lowest grade pool in which the item can be included. Leading zero required for grades 1-9.  IT - Infant/toddler PR - Preschool PK - Prekindergarten TK - Transitional Kindergarten KG - Kindergarten PS - Postsecondary UG - Ungraded NA - Not Applicable, used for resources only | 6 | Values can be referenced here: https://ceds.ed.gov/CEDSElementDetails.aspx?TermId=5100 However there is no CEDS equivalent for these item-related grade levels | xsd:token | 2 | IT, PR, PK, TK, KG, 01, 02, 03, 04, 05, 06, 07, 08, 09,10, 11, 12, 13, PS, UG, NA | Yes | 1 |  |
| 043 | ItemSpecFormat | Items may follow the SmarterApp specification or the QTI specification. When the same item is stored in both formats, the identifiers will be the same but the variant and versions will be different. | SmarterApp |  | xsd:token | 11 | QTI, SmarterApp | Yes | 1 |  |

Table 3. Example of Hierarchical Layout of IrtDimension

| Metadata File XML Section | Comment |
| --- | --- |
| <?xml version="1.0" encoding="ISO-8859-1" ?>  <metadata>  <smarterAppMetadata xmlns="http://www.smarterapp.org/ns/1/assessment\_item\_metadata"> | Generic start of item metadata file |
| <Identifier>652</Identifier>  <SmarterAppItemDescriptor>MAT.06.TE.1.000G.H.xxx</SmarterAppItemDescriptor>  <InteractionType>GI</InteractionType>  <Version>21</Version>  <Subject>MATH</Subject>  <Language>eng</Language>  <Language>spa</Language>  <SecurityStatus>Non-secure</SecurityStatus>  <MinimumGrade>05</MinimumGrade>  <IntendedGrade>06</IntendedGrade>  <MaximumGrade>06</MaximumGrade>  <BrailleType>Not Braillable</BrailleType>  <AllowCalculator>Yes</AllowCalculator>  <MathematicalPractice>6</MathematicalPractice>  <AssociatedTutorial>1075</AssociatedTutorial>  <AssociatedWordlist>1311</AssociatedWordlist>  <StandardPublication>  <Publication>SBAC-MA-V1</Publication>  <PrimaryStandard>1|G|H-6|a/s|6.G.2</PrimaryStandard>  <SecondaryStandard>1|G|H-6|a/s|6.G.2</SecondaryStandard >  <SecondaryStandard>1|G|H-6|a/s|6.G.2</SecondaryStandard >  <SecondaryStandard>1|G|H-6|a/s|6.G.2</SecondaryStandard >  </StandardPublication>  <StandardPublication>  <Publication>SBAC-MA-V2</Publication>  <PrimaryStandard>1|G|H-6|a/s|6.G.2</PrimaryStandard>  <SecondaryStandard>1|G|H-6|a/s|6.G.2</SecondaryStandard >  <SecondaryStandard>1|G|H-6|a/s|6.G.2</SecondaryStandard >  <SecondaryStandard>1|G|H-6|a/s|6.G.2</SecondaryStandard >  </StandardPublication>  <MaximumNumberOfPoints>1</MaximumNumberOfPoints>  <ScorePoints>"0,1"</ScorePoints>  <ItemSpecFormat>SmarterApp</ItemSpecFormat>  <StimulusFormat>Standard</StimulusFormat>  <EducationalDifficulty>Medium</EducationalDifficulty>  <DepthOfKnowledge>2</DepthOfKnowledge>  <AdministrationDate>Pilot</AdministrationDate> | All metadata elements except IrtDimension and its sub-elements |
| <IrtDimension>  <IrtDimensionPurpose>Computation</IrtDimensionPurpose>  <IrtModelType>IRT3pl</IrtModelType>  <IrtScore>1</IrtScore>  <IrtWeight>1.0</IrtWeight>  <IrtParameter>  <Name>a</Name>  <Value>1.0</Value >  </IrtParameter >  <IrtParameter>  <Name>b</Name>  <Value>-0.4</Value >  </IrtParameter>  <IrtParameter>  <Name>c</Name>  <Value>0.33</Value >  </IrtParameter >  </IrtDimension> | First dimension parameters |
| <IrtDimension>  <IrtDimensionPurpose>Abstraction</IrtDimensionPurpose>  <IrtModelType>IRT3pl</IrtModelType>  <IrtScore>2</IrtScore>  <IrtWeight>1.0</IrtWeight>  <IrtParameter>  <Name>a</Name>  <Value>0.86</Value >  </IrtParameter >  <IrtParameter>  <Name>b</Name>  <Value>1.05</Value >  </IrtParameter >  <IrtParameter>  <Name>c</Name>  <Value>0.15</Value >  </IrtParameter>  </IrtDimension> | Second dimension parameters |
| </smarterAppMetadata> | End of SmarterApp metadata |
| <OtherMetadata1>Standard</OtherMetadata1>  <OtherMetadata2>Medium</OtherMetadata2> | Other, non-SmarterApp metadata |
| </metadata> | End of metadata |