Smarter Balanced Item and Stimulus Metadata Specification

Table . Revision History

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| --- | --- |
| Description | Date |
| 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 | 16 September 2014 |
| Draft release to SmarterApp.org | 27 October 2014 |
| Acceptance Candidate | 25 November 2014 |
| Addition of the <IrtStatDomain> element in the IrtDimension hierarchy. | 26 May 2016 |

# 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 |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **Primary Fields** | | | | | | | | | |
| 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 |  |
| 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] |  |
| 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 | EBSR EQ ER GI HT HTQ MC MI MS NL SA TI TUT WER WORDLIST Stimulus  Plus QTI interaction types | 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 |  |
| 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] |  |
| 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] |  |
| 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 |  |
| 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 |  |
| 015 | IntendedGrade | Grade pool for which the item was authored. 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 | 04 | 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 |  |
| 017 | BrailleType | Which Braille files to create. BRF=Braille Ready Format. PRN=printer file | PRN |  | xsd:token | 15 | BRF, PRN, Not Braillable | No | 1 |  |
| 017a | BrailleStandard | The Braille format standard used for the braille transation | contracted |  | xsd:token | 40 |  | 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] |  |
| 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 |  |
| 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] |  |
| 031 | 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] |  |
| 031a | AssociatedStimulusVersion | Version of stimulus used with this item for this data collection |  |  | xsd:token | 40 |  | 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 |  |
| 041 | MaximumNumberOfPoints | Maximum points possible as authored. Not applicable to stimuli, wordlsts, and tutorial items; 1-6 for all other item types. | 2 |  | xsd:token | 2 | 1,2,3,4,5,6,NA | No | 1 |  |
| 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] |  |
| 043 | ItemSpecFormat | Items may be encoded in the SamrterApp Assessment Item Format (SAAIF) or the IMS QTI format. Future formats may be supported in the future. When the same item is stored in multiple formats, the identifiers will be the same but the variant and versions will be different. | SmarterApp |  | xsd:token | 11 | QTI, SmarterApp | Yes | 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] |  |
| 045 | StimulusGraphic | Does the stimulus contain a graphic? | Yes |  | xsd:boolean | 3 | Yes,No | No | 1 |  |
| 047 | EducationalDifficulty | Difficulty estimated by the item writer: low (easy), medium, hard | medium |  | xsd:token | 6 | Low,Medium,Hard | 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 |  |
| 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 |
| 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 |  |
| 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 |  |
| 055 | AchievementQuintile | Quintiles, from 1 (low) to 5 (high) | 2 |  | xsd:integer | 1 | 1, 2, 3, 4, 5 | 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 |  |
| 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 |  |
| 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 Performance Task | Yes |  | xsd:boolean | 3 | Yes, No | No | 1 |  |
| 069 | PerformanceTaskComponentItem | Part of a Performance Task | Yes |  | xsd:boolean | 3 | Yes, No | No | 1 |  |
| 070 | PtSequence | Indicates the location of an item within a Performance Task 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 | ID of associated Performance Task classroom activity | Yes |  | xsd:token | 3 | Yes, No | No | 1 |  |
| 073a | PtIdentifier | Unique ID of performance task this item is associated with |  |  | xsd:token | 40 |  | No | 1 |  |
| 073b | PtVersion | Version of PT used with this item for this data collection |  |  | xsd:token | 40 |  | No | 1 |  |
| 074 | AccessibilityTagsASLLanguage | Does the item have an ASL video associated with it? | Yes |  | xsd:boolean | 3 | Yes, No | 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 |  |
| 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] |  |
| 301 | Claim | Claim item is associated with (See also the Standard Alignment properties below) |  |  | Numeric |  | 1,2,3,4 | Yes |  |  |
| 302 | Target | Target item is associated with |  |  | Character |  | Math: A-Z; ELA:1-99 | Yes |  |  |
|  | **Standard Alignment** | | | | | | | | | |
|  | An assessment item may be aligned to multiple standard publications such as the Common Core State Standards or the Smarter Balanced Test Blueprint (which is aligned to the Common Core). In the XML rendition, each set of alignments is collected in a <StandardPublication> element. Each <StandardPublication> element must have one primary standard and zero or more secondary standards. See Table 3 for examples of the XML layout. | | | | | | | | | |
|  | Publication | The name of the standard publication to which this alignment set belongs. | SBAC-MA-V1 |  | xsd:token | 40 |  | 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] |  |
|  | **IRT Fields** | | | | | | | | | |
|  | An assessment item may have multiple sets of IRT parameters. In the XML rendition of the metadata, these sets are collected in an <IrtDimension> element. See Table 3 for details on the layout of IR dimensions and their corresponding parameters.  Each IRT parameter has a name and a value. The following are IRT parameters that have been defined to date.  **Name Description Name Description**  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] |  |
| 086 | IrtParameter/Name | Name of the IRT parameter | IRT\_A |  | xsd:token | 30 | See table of IRT names above. | No | [0..n] |  |
| 087 | IrtParameter/Value | Value of the IRT parameter | 1.07 |  | xsd:double | 20 |  | No | [0..n] |  |
| 097 | Administration | Spring 2014 Field Test |  |  | Character |  |  | No | [)..n] |  |
|  | **Field Test Data** | | | | | | | | | |
| 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 |  |  |  |  |  |
| 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 |  |  | No |  |  |
| 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 |  |  | No |  |  |
| 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 |  |  | No |  |  |
| 107 | Sample\_Size | The number of students included to calculate this set of item statistics |  |  | Numeric |  |  | No |  |  |
| 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 |  |  |  |  |  |
| 122 | Percent\_ChoosingA | Percentage of students selecting MC item option A |  |  | Numeric |  |  | No |  |  |
| 123 | Percent\_ChoosingB | Percentage of students selecting MC item option B |  |  | Numeric |  |  | No |  |  |
| 124 | Percent\_ChoosingC | Percentage of students selecting MC item option C |  |  | Numeric |  |  | No |  |  |
| 125 | Percent\_ChoosingD | Percentage of students selecting MC item option D |  |  | Numeric |  |  | No |  |  |
| 126 | Percent\_ChoosingE | Percentage of students selecting MC item option E |  |  | Numeric |  |  | No |  |  |
| 127 | Percent\_ChoosingF | Percentage of students selecting MC item option F |  |  | Numeric |  |  | No |  |  |
| 128 | Percent\_ChoosingG | Percentage of students selecting MC item option G |  |  | Numeric |  |  | No |  |  |
| 129 | Percent\_Obtaining\_0 | Percentage of students obtaining score 0 |  |  | Numeric |  |  | No |  |  |
| 130 | Percent\_Obtaining\_1 | Percentage of students obtaining score 1 |  |  | Numeric |  |  | No |  |  |
| 131 | Percent\_Obtaining\_2 | Percentage of students obtaining score 2 |  |  | Numeric |  |  | No |  |  |
| 132 | Percent\_Obtaining\_3 | Percentage of students obtaining score 3 |  |  | Numeric |  |  | No |  |  |
| 133 | Percent\_Obtaining\_4 | Percentage of students obtaining score 4 |  |  | Numeric |  |  | No |  |  |
| 134 | Percent\_Obtaining\_5 | Percentage of students obtaining score 5 |  |  | Numeric |  |  | No |  |  |
| 135 | Percent\_Obtaining\_6 | Percentage of students obtaining score 6 |  |  | Numeric |  |  | No |  |  |
| 136 | Percent\_Obtaining\_7 | Percentage of students obtaining score 7 |  |  | Numeric |  |  | No |  |  |
| 137 | Percent\_Obtaining\_8 | Percentage of students obtaining score 8 |  |  | Numeric |  |  | No |  |  |
| 138 | Biserial\_OptionA | Biserial for MC item option A |  |  | Numeric |  |  | No |  |  |
| 139 | Biserial\_OptionB | Biserial for MC item option B |  |  | Numeric |  |  | No |  |  |
| 140 | Biserial\_OptionC | Biserial for MC item option C |  |  | Numeric |  |  | No |  |  |
| 141 | Biserial\_OptionD | Biserial for MC item option D |  |  | Numeric |  |  | No |  |  |
| 142 | Biserial\_OptionE | Biserial for MC item option E |  |  | Numeric |  |  | No |  |  |
| 143 | Biserial\_OptionF | Biserial for MC item option F |  |  | Numeric |  |  | No |  |  |
| 144 | Biserial\_OptionG | Biserial for MC item option G |  |  | Numeric |  |  | No |  |  |
| 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 |  |  | No |  |  |
| 146 | Pt\_biserial\_OptionA | Point-biserial for MC item option A |  |  | Numeric |  |  | No |  |  |
| 147 | Pt\_biserial\_OptionB | Point-biserial for MC item option B |  |  | Numeric |  |  | No |  |  |
| 148 | Pt\_biserial\_OptionC | Point-biserial for MC item option C |  |  | Numeric |  |  | No |  |  |
| 149 | Pt\_biserial\_OptionD | Point-biserial for MC item option D |  |  | Numeric |  |  | No |  |  |
| 150 | Pt\_biserial\_OptionE | Point-biserial for MC item option E |  |  | Numeric |  |  | No |  |  |
| 151 | Pt\_biserial\_OptionF | Point-biserial for MC item option F |  |  | Numeric |  |  | No |  |  |
| 152 | Pt\_biserial\_OptionG | Point-biserial for MC item option G |  |  | Numeric |  |  | No |  |  |
| 153 | N\_ChoosingA | Number of students choosing MC item option A |  |  | Numeric |  |  | No |  |  |
| 154 | MeanCritScore\_OptionA | Mean criterion score of those students choosing option A |  |  | Numeric |  |  | No |  |  |
| 155 | N\_choosingB | Number of students choosing MC item option B |  |  | Numeric |  |  | No |  |  |
| 156 | MeanCritScore\_OptionB | Mean criterion score of those students choosing option B |  |  | Numeric |  |  | No |  |  |
| 157 | N\_ChoosingC | Number of students choosing MC item option C |  |  | Numeric |  |  | No |  |  |
| 158 | MeanCritScore\_OptionC | Mean criterion score of those students choosing option C |  |  | Numeric |  |  | No |  |  |
| 159 | N\_ChoosingD | Number of students choosing MC item option D |  |  | Numeric |  |  | No |  |  |
| 160 | MeanCritScore\_OptionD | Mean criterion score of those students choosing option D |  |  | Numeric |  |  | No |  |  |
| 161 | N\_ChoosingE | Number of students choosing MC item option E |  |  | Numeric |  |  | No |  |  |
| 162 | MeanCritScore\_OptionE | Mean criterion score of those students choosing option E |  |  | Numeric |  |  | No |  |  |
| 163 | N\_ChoosingF | Number of students choosing MC item option F |  |  | Numeric |  |  | No |  |  |
| 164 | MeanCritScore\_OptionF | Mean criterion score of those students choosing option F |  |  | Numeric |  |  | No |  |  |
| 165 | N\_ChoosingG | Number of students choosing MC item option G |  |  | Numeric |  |  | No |  |  |
| 166 | MeanCritScore\_OptionG | Mean criterion score of those students choosing option G |  |  | Numeric |  |  | No |  |  |
| 167 | N\_Omitting | Number of students omitting the item |  |  | Numeric |  |  | No |  |  |
| 168 | MeanCritScore\_Omit | Mean criterion score of those that omitted the item |  |  | Numeric |  |  | No |  |  |
| 169 | N\_Reached | Number of students reaching the item |  |  | Numeric |  |  | No |  |  |
| 170 | MeanCritScore\_Reached | Mean criterion score of those that reached the item |  |  | Numeric |  |  | No |  |  |
| 171 | N\_Cat\_0 | Number of students obtaining the score of 0 |  |  | Numeric |  |  | No |  |  |
| 172 | MeanCritScore\_Cat\_0 | Mean criterion score of those testers at score category 0 |  |  | Numeric |  |  | No |  |  |
| 173 | N\_Cat\_1 | Number of students obtaining the score of 1 |  |  | Numeric |  |  | No |  |  |
| 174 | MeanCritScore\_Cat\_1 | Mean criterion score of those testers at score category 1 |  |  | Numeric |  |  | No |  |  |
| 175 | N\_Cat\_2 | Number of students obtaining the score of 2 |  |  | Numeric |  |  | No |  |  |
| 176 | MeanCritScore\_Cat\_2 | Mean criterion score of those testers at score category 2 |  |  | Numeric |  |  | No |  |  |
| 177 | N\_Cat\_3 | Number of students obtaining the score of 3 |  |  | Numeric |  |  | No |  |  |
| 178 | MeanCritScore\_Cat\_3 | Mean criterion score of those testers at score category 3 |  |  | Numeric |  |  | No |  |  |
| 179 | N\_Cat\_4 | Number of students obtaining the score of 4 |  |  | Numeric |  |  | No |  |  |
| 180 | MeanCritScore\_Cat\_4 | Mean criterion score of those testers at score category 4 |  |  | Numeric |  |  | No |  |  |
| 181 | N\_Cat\_5 | Number of students obtaining the score of 5 |  |  | Numeric |  |  | No |  |  |
| 182 | MeanCritScore\_Cat\_5 | Mean criterion score of those testers at score category 5 |  |  | Numeric |  |  | No |  |  |
| 183 | N\_Cat\_6 | Number of students obtaining the score of 6 |  |  | Numeric |  |  | No |  |  |
| 184 | MeanCritScore\_Cat\_6 | Mean criterion score of those testers at score category 6 |  |  | Numeric |  |  | No |  |  |
| 185 | N\_Cat\_7 | Number of students obtaining the score of 7 |  |  | Numeric |  |  | No |  |  |
| 186 | MeanCritScore\_Cat\_7 | Mean criterion score of those testers at score category 7 |  |  | Numeric |  |  | No |  |  |
| 187 | N\_Cat\_8 | Number of students obtaining the score of 8 |  |  | Numeric |  |  | No |  |  |
| 188 | MeanCritScore\_Cat\_8 | Mean criterion score of those testers at score category 8 |  |  | Numeric |  |  | No |  |  |
| 189 | DIFCat\_Female\_v\_Male | Female vs. Male DIF category; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 190 | DIFCat\_Asian\_v\_White | Asian vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 191 | DIFCat\_Black\_v\_White | Black vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 192 | DIFCat\_Hispanic\_v\_White | Hispanic vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 193 | DIFCat\_NativeA\_v\_White | Native American vs. White DIF category; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 194 | DIFCat\_IEP\_v\_NonIEP | IEP students vs. non IEP students; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 195 | DIFCat\_LEP\_v\_NonLEP | LEP students vs. non LEP students; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 196 | DIFCat\_Title1\_v\_NonTitle1 | Title 1 eligible students vs. non eligible students; B+, B-, C+, C- |  |  | Character |  |  | No |  |  |
| 197 | N\_Male | Number of male students |  |  | Numeric |  |  | No |  |  |
| 198 | N\_Female | Number of female students |  |  | Numeric |  |  | No |  |  |
| 199 | N\_White | Number of white students |  |  | Numeric |  |  | No |  |  |
| 200 | N\_Asian | Number of Asian students |  |  | Numeric |  |  | No |  |  |
| 201 | N\_Black | Number of black students |  |  | Numeric |  |  | No |  |  |
| 202 | N\_Hispanic | Number of Hispanic students |  |  | Numeric |  |  | No |  |  |
| 203 | N\_NativeAmerican | Number of native American students |  |  | Numeric |  |  | No |  |  |
| 204 | N\_IEP | Number of IEP students |  |  | Numeric |  |  | No |  |  |
| 205 | N\_LEP | Number of LEP students |  |  | Numeric |  |  | No |  |  |
| 206 | N\_Title1 | Number of Title 1 eligible students |  |  | Numeric |  |  | No |  |  |
| 207 | MHDDIF\_F\_M | The MH-D-DIF from the comparison of Female vs. Male students. |  |  | Numeric |  |  | No |  |  |
| 208 | SMD\_F\_M | Standardized mean differences from the comparison of Female vs. Male students. |  |  | Numeric |  |  | No |  |  |
| 209 | MHDDIF\_Asian\_White | The MH-D-DIF from the comparison of Asian vs. White students. |  |  | Numeric |  |  | No |  |  |
| 210 | SMD\_Asian\_White | Standardized mean differences from the comparison of Asian vs. White students. |  |  | Numeric |  |  | No |  |  |
| 211 | MHDDIF\_Black\_White | The MH-D-DIF from the comparison of Black vs. White students. |  |  | Numeric |  |  | No |  |  |
| 212 | SMD\_Black\_White | Standardized mean differences from the comparison of Black vs. White students. |  |  | Numeric |  |  | No |  |  |
| 213 | MHDDIF\_Hispanic\_White | The MH-D-DIF from the comparison of Hispanic vs. White students. |  |  | Numeric |  |  | No |  |  |
| 214 | SMD\_Hispanic\_White | Standardized mean differences from the comparison of Hispanic vs. White students. |  |  | Numeric |  |  | No |  |  |
| 215 | MHDDIF\_NativeA\_White | The MH-D-DIF from the comparison of Native American vs. White students. |  |  | Numeric |  |  | No |  |  |
| 216 | SMD\_NativeA\_White | Standardized mean differences from the comparison of Native American vs. White students. |  |  | Numeric |  |  | No |  |  |
| 217 | MHDDIF\_IEP\_NonIEP | The MH-D-DIF from the comparison of students in Individualized Education Program (IEP) vs. non IEP students. |  |  | Numeric |  |  | No |  |  |
| 218 | SMD\_IEP\_NonIEP | Standardized mean differences from the comparison of IEP vs. non IEP students. |  |  | Numeric |  |  | No |  |  |
| 219 | MHDDIF\_LEP\_NonLEP | The MH-D-DIF from the comparison of students with Limited English Proficiency (LEP) vs. non LEP students. |  |  | Numeric |  |  | No |  |  |
| 220 | SMD\_LEP\_NonLEP | Standardized mean differences from the comparison of LEP vs. non LEP students. |  |  | Numeric |  |  | No |  |  |
| 221 | MHDDIF\_Title1\_NonTitle1 | The MH-D-DIF from the comparison of students who are eligible or not eligible for Title 1. |  |  | Numeric |  |  | No |  |  |
| 222 | SMD\_Title1\_NonTitle1 | Standardized mean differences from the comparison of students who are eligible or not eligible for Title 1. |  |  | Numeric |  |  | No |  |  |
| 251 | MaximumPointsScored | Highest score category used in statistical analysis. Typically the highest score achieved by students in the field test. | 3 |  | xsd:token | 2 | Integer | No | 1 |  |
| 252 | MinimumPointsScored | Lowest score category used in statistical analysis-usually zero. Based on results from the field test. |  |  | Numeric |  | Integer |  |  |  |
| 253 | IRT\_Category\_ReCoding | Informational; the revised score categories for Field Test IRT calibration due to fewer than optimal number of scored responses in some score categories; for example, "0,1,1" indicates that that a 2-point item was collapsed into a 1-point item by changing the students' scores from "2" to "1"; "0,0,1" indicates that that a 2-point item was collapsed into a 1-point item by changing the students' scores from "1" to "0" and "2" to "1"; | | | xsd:token | 8 |  | No |  |  |
|  | **Licensed Content Info** | | | | | | | | | |
| 350 | LicensedWorkStandardNumber | The ISBN or ISSN of the licensed work. |  |  |  |  |  | No | 1 |  |
| 351 | LicensedWorkTitle | Title of the work or publication. For periodicals it is the title of the periodical, not of the article. |  |  |  |  |  | No | 1 |  |
| 352 | LicensedWorkArticleTitle | Title of the article in a periodical (if applicable) |  |  |  |  |  | No | 1 |  |
| 353 | LicensedWorkAuthor | Author of the licensed work. |  |  |  |  |  | No | 1 |  |
| 354 | LicensedWorkPublisher | Publisher of the licensed work. |  |  |  |  |  | No | 1 |  |
| 355 | LicensedWorkDate | Publication date of the licensed work. |  |  |  |  |  | No | 1 |  |
| 356 | LicensedWorkLocation | Location of the publisher of the licensed work (from the copyright page or masthead). |  |  |  |  |  | No | 1 |  |
| 357 | LicensedWorkVolNum | Volume/Number/Series (if applicable). E.g. “Volume 3 Number 5” |  |  |  |  |  | No | 1 |  |
| 358 | LicensedWorkCccId | The Copyright Clearance Center CCC ID Number (if available) |  |  |  |  |  | No | 1 |  |
|  | **Other Tags** | | | | | | | | | |
| 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 |  |  |

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>  <IrtStatDomain>Online</IrtStatDomain>  <IrtScore>1</IrtScore>  <IrtWeight>1.0</IrtWeight>  <IrtParameter>  <Name>IRT\_A</Name>  <Value>1.0</Value >  </IrtParameter >  <IrtParameter>  <Name>IRT\_B</Name>  <Value>-0.4</Value >  </IrtParameter>  <IrtParameter>  <Name>IRT\_C</Name>  <Value>0.33</Value >  </IrtParameter >  </IrtDimension> | First dimension parameters |
| <IrtDimension>  <IrtDimensionPurpose>Abstraction</IrtDimensionPurpose>  <IrtModelType>IRT3pl</IrtModelType>  <IrtStatDomain>Online</IrtStatDomain>  <IrtScore>2</IrtScore>  <IrtWeight>1.0</IrtWeight>  <IrtParameter>  <Name>IRT\_A</Name>  <Value>0.86</Value >  </IrtParameter >  <IrtParameter>  <Name>IRT\_B</Name>  <Value>1.05</Value >  </IrtParameter >  <IrtParameter>  <Name>IRT\_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 |