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Subject: NWEA Item Development Overview

NWEA recognizes that presenting students with quality test questions written at the appropriate level that fairly and comprehensively assesses the content standards is critical for a meaningful assessment. For test questions to assess the breadth and depth of these standards, NWEA conducts a careful analysis of the content standards and creates a thoughtful plan for item development.

NWEA develops test items for specific content standards. To produce quality test items, NWEA follows a clearly defined process that uniformly reviews and finalizes all items and passages. NWEA's team of experts adheres to a consistent item (and passage) development and review process that invites Maine educators and Department of Education members to participate. The result of this analysis, planning, and review includes items presented to students in the form of assessments whose reports reveal student mastery and or performance for particular content areas and grades. Below are the steps NWEA uses to develop items that meet the depth and breadth of the content standards.

1. **Standard(s) review and breakdown:** Before item development can begin, content experts review, analyze, and unpack (break down) each standard to define specific topics (contained within the standard) and identify the cognitive demand addressed within the standard. This breakdown includes specifics about what part of the standard some items will address and how other items will assess the standard as a whole. During this step, content experts consider the depth of knowledge (DOK) for the standards or part(s) of the standard to be assessed.

Resources

- a. [Common Core State Standards \(CCSS\): ELA/Literacy](#) (Note: Maine's accountability standards consist of the Reading CCSS.)
 - b. [Common Core State Standards \(CCSS\) Math](#)
 - c. [Webb's Depth of Knowledge \(DOK\)](#)
2. **Test Blueprints and Item Development Plan:** The standards analysis step is followed by a decision-making process that results in a test blueprint, a document defining the relative representation of topics and standards on the assessment, and/or an item development plan. The test blueprints inform the item development plan that enumerates how many items (and of which types) will be developed to each standard/Achievement Level Descriptor (ALD). The item development plan may also call out the DOK level items will be written to. These two documents ensure that the assessment consistently covers the breadth of the standards from year to year. The Maine Through Year Assessment blueprints can be found here:
https://www.maine.gov/doe/Testing_Accountability/MECAS/NWEA

3. **Item Development:** Items are written internally by NWEA content specialists or external professional item writers. Items align to a part of one standard or the entire standard. NWEA's content specialists identify the cognitive demand of each item. The rigor of each item comes from the knowledge and skills required to answer the item correctly, which is dictated by the standard. Test items may be written to Webb's Depth of Knowledge levels 1, 2, or 3. A particular content standard that has been unpacked (broken down) can have a pool of items developed to the unpacked parts of the standard that align to more than one DOK level. Developers of the summative tests, however, also aim to develop items that assess a standard/ALD as a whole to determine a student's complete mastery of that standard/ALD. Additionally, content developers ensure that summative items meet the Achievement Level Descriptors (what a student should be able to do at a particular grade level regarding on-grade-level content). Once developed, items and passages go through multiple (and thorough) reviews for content, bias and sensitivity, permissions, editorial, and item functionality.

Resource

- a. ALD Explorer Tool: <https://ald-explorer.nwea.org/>
4. **Field Testing:** All newly created items are then field-tested (not contributing to the student score) before becoming operational (contributing to the student score). This step results in data that can be analyzed to ensure that newly developed items are performing as expected. Once newly developed items are field tested, NWEA psychometricians and content team members review item performance data to determine if the item(s) will be part of the operational item pool or if revisions should be applied and the item(s) re-field tested.
5. **Validation with a third party:** Besides its internal team, NWEA partners with third parties to validate the alignments of items to standards to help improve our approach to item writing for optimal alignment. This is a final external review of items to verify how they align (or match) certain parts of a content standard or the entire content standard.

In summary, NWEA uses content standards as the basis for all test items, and any newly created items follow a thorough development process and review that ensures the breadth and depth of the content standards are met. Educators can apply this approach in their classrooms by studying the content standards and then determining what curriculum materials and instructional activities best align to the standards.