Applying Depth of Knowledge (DOK) Levels in Writing
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According to Norman L. Webb ("Depth-of-Knowledge Levels for Four Content Areas," March 28, 2002), interpreting and assigning depth-of-knowledge levels to both objectives within standards and assessment items is an essential requirement of alignment analysis. Four levels of depth of knowledge (DOK) are used for this analysis.

In this paper, a general definition for each of the four (Webb) Depth of Knowledge levels is followed by Table 1, which provides further specification and examples for each of the DOK levels. Webb recommends that large-scale, on-demand assessments in writing should only assess Depth of Knowledge Levels 1, 2, and 3. Because of the nature of Level 4 writing activities, Depth of Knowledge at Level 4 in writing is best reserved for local assessment, and is included in this discussion for illustrative purposes. Table 2 provides examples of DOK "ceilings" (the highest level of cognitive demand for large-scale assessment items) using one state's writing grade level expectations as examples.

Descriptors of Levels for Writing (based on Webb, March 2002 and Webb, *Technical Issues in Large-Scale Assessment*, report published by CCSSO, December 2002)

Level 1 requires the student to write or recite simple facts. This writing or recitation does not include complex synthesis or analysis, but basic ideas.

Level 2 requires some mental processing, such as beginning to connect ideas using a simple organizational structure. At this level, students are engaged in first draft writing for a limited number of purposes and audiences. Students are beginning to connect ideas using a simple organizational structure for such things as composing a short, accurate summary.

Level 3 requires some higher-level mental processing. Students are developing multi-paragraph compositions that may include complex sentence structures or demonstrate some synthesis and analysis. Revisions are made to the writing to improve precision of language used and to produce a logical progression of ideas

Level 4 Higher-level thinking is central to this level. Multi-paragraph compositions demonstrate synthesis, analysis, and evaluation of complex ideas or themes and evidence of a deep awareness of purpose and audience. Synthesis and analysis of information from multiple sources often includes identifying the complexities, discrepancies, and/or the differences in perspectives found in each medium.

Table 1 – Detailed Descriptions of Depth of Knowledge Levels for Writing
(Adapted by Karin Hess, Center for Assessment/NCIEA, 2005, Based on Webb)

Level 1	Level 2	Level 3	Level 4
Some examples that represent, but do not constitute all Level 1 writing performances:	**Some examples that represent, but do not constitute all Level 2 writing performances:**	**Some examples that represent, but do not constitute all Level 3 writing performances:**	**Some examples that represent, but do not constitute all Level 4 writing performances:**
a. Listing/generating ideas or words prior to developing written composition (e.g., brainstorming, webbing) b. Selecting or recalling appropriate vocabulary (words, phrases, idioms) to achieve intended meaning in writing c. Writing simple sentences d. Using punctuation marks and capitalization correctly in writing and editing e. Using Standard English conventions in writing and editing to correct errors f. Identifying misspelled words in a written passage g. Applying conventional spelling patterns/rules to new situations in writing h. Using resources (dictionary, thesaurus) to correct spelling in written passages i. Using resources to identify Standard English grammatical structures for correction j. Using resources to apply basic formats for documentation	a. Note-taking or outlining as a means of organizing ideas for writing b. Developing text which <u>may be</u> limited to one paragraph c. Using simple organizational strategies to structure written work (e.g., basic paragraph form: indenting, main idea, supporting details; simple transitions) d. Constructing a variety of sentence types (e.g., simple and compound, sentences with embedded phrases) e. Writing summaries that contain the main idea of a reading selection and pertinent details or quotations f. Demonstrating basic understanding and appropriate use of such reference materials as a dictionary, thesaurus, or web site g. Editing final drafts of compositions for mechanics and conventions, including grammar, punctuation, and capitalization	a. Developing compositions that include multiple paragraphs b. Using complex or varied sentence structures in written compositions c. Demonstrating some synthesis and analysis in writing (making inferences; determining relationships; generalizing, or connecting ideas) d. Showing awareness of audience and purpose through focus, organization, voice/tone e. Using appropriate organizational text structures (e.g., description; chronology; proposition/support; compare/contrast; cause/effect) f. Editing and revising to improve the quality and meaning of the composition g. Supporting ideas with details, examples, quotations, text references, and/or citations h. Revising final drafts to improve organization and precision of language to produce a logical progression of ideas i. Summarizing information from multiple sources to address a specific topic	a. Developing multi-paragraph compositions that demonstrate synthesis and analysis of complex ideas or themes b. Analyzing author's craft (e.g., style, bias, literary techniques, point of view) c. Demonstrating evidence of a deep awareness of purpose and intended audience. (e.g., in informational reports including hypotheses and supporting evidence) d. Creating compositions that demonstrate a distinct voice and that stimulate the reader or listener to consider new perspectives on the addressed ideas or themes **e.** Writing an analysis of two selections, identifying the common theme and generating a purpose that is appropriate for both **f.** Gathering, analyzing, and evaluating written information for the purpose of drafting a reasoned report that supports and appropriately illustrates inferences and conclusions drawn

Depth of Knowledge as a "Ceiling" NOT as a "Target"

An important aspect of the grade level assessment design is to use the highest Depth of Knowledge (DOK) demand implicit in a GLE as the "ceiling" for assessment, not the "target." Table 2 provides three examples of one state's draft Writing GLEs with different "ceilings," that is, the highest Depth of Knowledge Level at which a GLE should be assessed. When considering the highest Depth of Knowledge Level as the ceiling not the target, the GLE has the potential to be assessed at Depth of Knowledge Levels at the ceiling, and up to the ceiling, depending upon the demand of the GLE. Table 2 also indicates *the other DOK levels at which the GLE could be assessed.*

Table 2   Examples of GLEs and Depth of Knowledge for Assessment Purposes

Examples of one state's *draft* Writing GLEs Grade levels are in [brackets]	Ceiling	Potential DOK Levels for Assessment
PS W4.5 - Use Citations: The student… • W [9] 4.5.1 Gives credit for others' ideas, images, and information, including quotations or others' ideas directly paraphrased by student, by citing information about sources, including title and author using a standard method of documentation (e.g., MLA style)	**1**	**1** (Applying basic rules; Applying basic formats)
PS W1.1-Write about a topic: The student… • W [3] 1.1.1 Writes a paragraph with a topic sentence and two or more supporting details • W [3] 1.1.2 Writes complete sentences with a subject and predicate • W [3] 1.1.3 Writes a story or composition with a beginning, middle, end	**2**	**1** (Writing simple sentences) **2** (Using a simple organizational structure; Developing text which might be limited to one paragraph)
PS W3.4 - Revise: The student … • W [7] 3.4.1 Rearranges details to improve clarity and logical progression of ideas (e.g., making chronological sequence clear, clarifying cause and effect, creating a logically consistent story line) • W [7] 3.4.2 Adds details to support main ideas and adds a topic sentence for a paragraph if needed • W [7] 3.4.3 Revises to improve quality and effectiveness of writing (e.g., combines related sentences to improve fluency, improves word choice by selecting a more precise term or a more vivid word, eliminates irrelevant details)	**3**	**1** (Selecting appropriate vocabulary to achieve intended meaning in writing) **2** (Organizing ideas; Selecting details to support focus; Using simple organizational structure) **3** (Revising final drafts to produce logical progression of ideas)

Why is this distinction between "ceiling" and "target" important?
If assessed only at the "target," all GLEs with a Level 3 as their highest demand would only be assessed at Level 3. This would potentially have two negative impacts on the assessment: 1) The assessment as a whole could be too difficult; and 2) important information about student learning along the achievement continuum would be lost.

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