

INTRODUCTION

The Common Core Essential Elements (EEs) are linked to the Common Core State Standards (CCSS) for Mathematics. A group of general educators, special educators, and content specialists from member states in the Dynamic Learning Maps (DLM) Consortium gathered to determine the essence of the CCSS.

This document provides a high-level view of the relationship between the CCSS and the links to content standards for students with significant cognitive disabilities. It is intended to provide a beginning structure for the design of a summative alternate assessment. The document is not intended as a stand-alone guide to instruction, nor is it intended to contain all the steps in a complete learning progression or detailed curriculum. The DLM and associated professional development will provide greater detail than described in this document.

Beginning with the Mathematics CCSS, stakeholders defined links to illuminate the precursors for the essential content and skills contained in the grade level CCSS clusters and indicators. These EEs are not intended as a redefinition of the content standards. Rather, they are intended to describe challenging content expectations for students with significant cognitive disabilities in relation to the CCSS. The EEs clarify the bridge between grade level expectations for students with significant cognitive disabilities who participate in alternate assessments and the CCSS.

Neither are the EEs intended to prescribe the beginning or end of instruction on the content and skills they represent; rather, they indicate the grade level at which initial mastery would be the target to be assessed. Students should begin instruction in content and skills at the earliest point possible and continue instruction until mastery is attained.

The stakeholder group, consisting of state education agency (SEA) representatives and SEA-selected content teachers of students with significant cognitive disabilities, developed the Range of Complexity Examples for each of the EEs. The Range of Complexity Examples are intended to assist teachers to envision how the broad range of students with significant cognitive disabilities might perform the same content, despite the different challenges their disabilities might present. The Range of Complexity Examples are not exhaustive and do not represent the full range of possibilities in which the highly diverse population of students with significant cognitive disabilities might access the EEs or demonstrate the achievement of those elements. However, the Range of Complexity Examples do provide some of the ways that the EEs may be instructed across the spectrum of students with significant cognitive disabilities.

These EEs in conjunction with learning maps will be used to help provide a bridge to create alternate assessments that are aligned to grade level content for students with significant cognitive disabilities. The EEs will also prove useful for teachers, assessment designers, and users of test results once alternate assessments have been created which are aligned to the EEs.

NCLB Guidance

The stakeholder group's work was guided by the U. S. Department of Education's Peer Review Guidance (*Standards and Assessments Peer Review Guidance: Information and Examples for Meeting Requirements of the No Child Left Behind Act of 2001 [NCLB]*), which requires that alternate academic achievement standards align with the alternate assessment. They must

- include knowledge and skills that link to grade level expectations,
- promote access to the general curriculum, and
- reflect professional judgment of the highest learning standards possible for the group of students with the most significant cognitive disabilities.

Although the grade-level content may be reduced in complexity or adjusted to reflect prerequisite skills, the link to grade-level content standards must be clear. The Peer Review Guidance notes that the concept of alternate achievement standards related to grade level may be ambiguous. According to the Guidance, the standards

- should be defined in a way that supports individual growth because of their linkage to different content across grades;
- are not likely to show the same clearly defined advances in cognitive complexity as the general education standards when examined across grade levels;
- should rely on the judgment of experienced special educators and administrators, higher education representatives, and parents of students with disabilities as they define alternate achievement standards; and
- should provide an appropriate challenge for students with the most significant cognitive disabilities as they move through their schooling.

The Guidance requires links to grade-level standards. The EEs were developed by DLM consortium states to differentiate knowledge and skills by grade level. This differentiation is intended to clarify the link between the grade-level EEs and the grade-level CCSS and to show a forward progression across grades. The progression of content and skills across years of instruction reflect the changing priorities for instruction and learning as students move from grade to grade. The differences from grade level to grade level are often subtle and progression is sometimes more horizontal than vertical. For example, the grade-to-grade level differences may consist of added skills that are not of obvious increasing rigor compared to the differences found in the CCSS across grade levels. To the degree possible, skills escalate in complexity or rigor across the grades, with clear links to the shifting emphasis at each grade level in the CCSS.

Access to Instruction and Assessment

The EEs and the Range of Complexity Examples developed by the DLM consortium states are intended to create the maximum possible access to the CCSS for students with significant cognitive disabilities. The way in which information is presented for instruction and assessment and the manner in which students demonstrate achievement is in no way intended to be limited by statements of EEs or the Range of Complexity Examples. To that end, modes of communication, both for presentation or response, are not stated in either the EEs or Range of Complexity Examples unless a specific mode is an expectation. Where no limitation has been stated, no limitation should be inferred. Students' opportunities to learn and to demonstrate learning should be maximized by providing whatever communication, assistive technologies,

augmentative and alternative communication (AAC) devices, or other access tools that are necessary and routinely used by the student during instruction.

Students with significant cognitive disabilities include a broad range of students with diverse disabilities and communication needs. For some students with significant cognitive disabilities, graphic organizers similar to those used by students without disabilities provide useful access to content and are adequate to maximize opportunities to learn and demonstrate achievement. Other students require a range of assistive technologies to access content and demonstrate achievement. For some students, AAC devices and accommodations for hearing and visual impairments will be needed. As with other physical disabilities, students with visual impairments may perform some expectations using modified items, presentations, or response formats. A few items may not lend themselves to such modifications. Decisions about the appropriate modifications for visual impairments are accounted for in the design of the assessments.

The access challenge for some is compounded by the presence of multiple disabilities. All of these needs, as well as the impact of levels of alertness due to medication and other physical disabilities which may affect opportunities to respond appropriately, need to be considered.

Most presentation and response access conditions do not constitute accommodations as they are understood for students who take the general assessment. Methods of presentation that do not violate the intended construct by aiding or directing the students' response allow the student to perceive what knowledge or skill is expected. Aids to responding that do not constitute a violation of the intended construct allow the student to demonstrate the expected knowledge and skills. Examples of acceptable access technologies include the following:

- communication devices that compensate for a students' physical inability to produce independent speech.
- devices that compensate for a students' physical inability to manipulate objects or materials, point to responses, turn pages in a book, or use a pencil or keyboard to answer questions or produce writing.
- tools that maximize a students' ability to acquire knowledge and skills and to demonstrate the products of their learning.

Accessing the General Curriculum

Technology is also of particular importance to students with significant cognitive disabilities to access the general curriculum and achieve the EEs. Although educators have traditionally viewed technology as hardware and software, assistive technology tenets provide a broader view of the applications of low, medium, and high levels of technology use. Assistive technology tools can be vital to a student in acquiring and demonstrating learning unimpeded by the barriers that the disability presents.

Model Symbol Use Throughout Instruction

Many students with significant cognitive disabilities have difficulty with or cannot use speech to communicate and/or are supported by the use of communication symbols (e.g., communication boards, speech generating devices, voice output communication devices) and supports to augment their speech and other means of communication. Students who require symbols and other AAC supports require frequent modeling in the use of those symbols to interact and

respond during instruction. Students who use symbols and other communication supports need as much modeling as children who use speech to communicate. Modeling in this way is not viewed as a means of prompting, guidance, or support, just as having a teacher talk serves those purposes for a student who communicates using speech.

When modeling the use of symbols and other communication supports, teachers use the symbols and supports themselves, hand them to students without communication impairments to use, and involve the students who need to use them every day. Each of these steps can play an important role in validating the use of symbols and communication supports and demonstrating multiple levels of expertise in their use.

Use Partner-Assisted Scanning Across the Day

Making a choice from the items on a list, symbols, tactuals, or a communication board can be difficult for some students because they lack the ability to point, cannot see or read the choices, or are positioned too far away (as in group activities). Partner-assisted scanning addresses these issues by asking the communication partner (a teacher, paraprofessional, or peer) to point to each of the options pausing long enough at each for the students with physical and communication impairments to respond “yes” if the item is their desired choice. Depending on the needs of an individual child, the partner can name each option when pointing or simply point.

The Range of Complexity Examples are provided that require students to select, identify, recognize, and so forth from a number of options. It is suggested that teachers use partner-assisted scanning to support these modes of responding and communicating whenever it appears that the act of directly pointing to a response is too difficult for a particular student.

Use First-Letter Cueing as a Communication Strategy Whenever Possible

Students with communication impairments who are beginning to read, write, and communicate regularly face the challenge of not having access to the words or symbols they want or need to communicate effectively. When attempting to provide them with every possible word they might need, the result is an unmanageable communication system. When guessing what will be most important, it is inevitable that some guesses will be wrong. Until students can spell well enough to communicate their own thoughts, it is important to rely on cueing strategies. First-letter cueing is one such strategy. Students can use an alphabet display to point to the first letter (or try to spell more) of the word they are trying to communicate. Teachers can use this strategy to help students respond efficiently to questions that involve known choices. Teachers can also model the use of first-letter cueing in their day-to-day interactions with the class.

Natural opportunities to incorporate this strategy occur when the teacher is prompting students to recall a specific word (e.g., “I am thinking of a new word we learned yesterday that started with the letter ‘t’.”) or concept (e.g., “Who remembers the big word we learned to describe when we put things together to find out how many we have in all? It begins with the letter ‘a’.”). There are times every school day when the adults in the class can model the use of first-letter cueing.

Guidance and Support

The authors of the CCSS use the words, “prompting and support” at the earliest grade levels to indicate when students were not expected to achieve standards completely independently. Generally, “prompting” refers to “the action of saying something to persuade, encourage, or remind someone to do or say something” (McKean, 2005). However, in special education, prompting is often used to mean a system of structured cues to elicit desired behaviors that otherwise would not occur. In order to communicate clearly that teacher assistance is permitted during instruction of the EEs, and is not limited to structured prompting procedures, the decision was made by the stakeholder group to use the more general term *guidance* throughout the EEs and the Range of Complexity Examples.

Guidance and support during instruction should be interpreted as teacher encouragement, general assistance, and informative feedback to support the student in learning. Some examples of the kinds of teacher behaviors that would be considered guidance and support include

- getting the student started (e.g., “Tell me what to do first”),
- providing a hint in the right direction without revealing the answer (e.g., Student wants to write dog but is unsure how, the teacher might say, “See if you can write the first letter in the word, /d/og.”),
- narrowing the field of choices as a student provides an inaccurate response,
- using structured technologies such as task specific word banks, or
- providing the structured cues such as those found in prompting procedures (e.g., least-to-most prompts, simultaneous prompting, and graduated guidance).

Guidance and support as described above apply to instruction per the examples provided in the Range of Complexity Examples. The Range of Complexity Examples are intended to provide an idea of how students might perform the EEs as they work toward independent mastery.

Alternate assessments measure the degree to which students with significant cognitive disabilities have mastered the EEs. During any assessment, accommodation(s) allowed on the assessment must have been used and practiced during instruction; however, some accommodations that are permissible during instruction would compromise the integrity of the assessments, thereby yielding invalid and unreliable results and cannot be used for assessment purposes. Some guidance and support strategies may not be allowed for assessment purposes when variance in teacher assistance, cues, and prompts could compromise judgments about mastery of the EEs and comparability of administration.

Relationship to the Dynamic Learning Maps Assessment

The EEs and Range of Complexity Examples developed by the DLM consortium states and their stakeholder representatives serve two functions. Instructionally, they provide teachers with information about the level of knowledge and skills expected of their students. Second, they provide elaboration that teachers can use to help guide instruction. Teachers may find that the Range of Complexity Examples are useful for envisioning how their students might perform as they progress toward the expected content standards, as long as they keep in mind that they are examples only and cannot represent the full range of ways in which students might demonstrate their understanding of the content standards.

For purposes of the DLM assessments under development, the EEs and CCSS provide guidance into the creation of learning maps that depict learning pathways toward the mastery of grade level content standards. The EEs and the Range of Examples , along with learning maps, provide guidance to the development of the alternate assessment so that a full range of performance is measured that is aligned to grade level content standards. In a future step, the EEs, learning maps, and data from the DLM assessments will be considered to create appropriate alternate achievement standards for students with significant cognitive disabilities that will take the DLM assessments.

System Alignment

The EEs are intended to contribute to a fully aligned system of standards, curriculum, teaching, learning, technology, and assessment that optimize equity of opportunity for all students in each classroom, school, and local education agency to access and learn the standards. To the degree possible, the grade level EEs are vertically aligned and linked to the grade level CCSS.

The linkages provided by the EEs to the CCSS are intended to increase access to the general curriculum for all students with disabilities. Examples provided in the Range of Complexity Examples are designed for special education and general education classroom teachers to use in working with special education students who have significant cognitive disabilities. The Range of Complexity Examples illuminate the range and kinds tasks associated with each content standard.

Just as the EEs and Range of Complexity Examples are designed to guide teaching practices toward achievement in academic content areas, the EEs also reframe the expectations for foundational skills in pre-academic and academic areas. Precursor/prerequisite and the unique enabling skills related to mathematics content is specified in the context of their roles as a foundation for students with significant cognitive disabilities to achieve skills related to academic content.

Range of Complexity Examples

The Range of Complexity Examples are intended as a resource for developing individualized education plan (IEP) goals, benchmarks, and curricular materials in reading, language arts, and mathematics. Students may need goals and benchmarks in areas other than academic content domains (e.g., self-care/living skills, mobility). As always, IEPs address the individual needs of each student to make progress toward the standards.

Document Organization

Common Core Grade-Level Clusters are the Cluster titles and Grade-Level Indicators as they appear in the CCSS for Mathematics (Common Core State Standards Initiative, 2010).

Common Core Essential Elements (EEs) describe links to the CCSS for access by students with significant cognitive disabilities.

Range of Complexity Examples are examples that show ranges of possible ways of how the EE may be instructed.

CCSS Grade-Level Clusters	Common Core Essential Elements	Range of Complexity Examples
<p>Represent and solve problems involving addition and subtraction.</p>	<p>EE1.OA.1.a. Use language to describe putting together and taking apart, aspects of addition and subtraction.</p>	<p>Students will:</p> <p>EE1.OA.1.a. Use words like take away, subtract, give, add, more, and same quantity, when putting together and taking apart. Ex. When gathering and distributing classroom supplies, appropriately use words like "more" and "take away" (handing out paper, pencils, or other tools used in a lesson). Ex. When picking teams for P.E., use the language of "I need one more student" or "I need to take away one more from my team." Ex. Request "one more" or "take away" one or more when the teacher has set up an activity where there is an uneven number of supplies. Ex. During an activity, use "add," "more," "less," etc. to indicate when a different amount is needed.</p> <p>EE1.OA.1.a. Use language to describe putting together and taking apart, aspects of addition and subtraction. Ex. After the teacher shows six blocks and removes two, label the action as "take away" or informal language with the same meaning. Ex. Appropriately use "more" and "give" to express desire for more snacks or blocks. Ex. Use one-to-one correspondence to line up two sets of objects and ask which group has more/less. Ex. During practice of adding __ more to a numeral, show correct flashcard when asked, "I have two; who has two more (4)?"</p> <p>EE1.OA.1.a. Put together or take away. Ex. Take away one crayon from the box. Ex. Put together red blocks and green blocks when asked. Ex. Give coins to purchase an item or take change at end of purchase. Ex. Give the teacher two blocks and then two more blocks.</p> <p>EE1.OA.1.a. Follow directions to put together or take away an object with a verbal prompt. Ex. In a classroom routine and when presented with a component needed for the routine, give component(s) when asked to put together for the activity. Ex. Take a paper or object from peer when passed out. Ex. Offer paper or object to peer to put together with group's work when collected at the end of the lesson.</p>

Directions for Interpreting Essential Elements

Essential Elements (EEs). The EEs are statements that provide links for students with significant cognitive disabilities to the essential content and skills defined in the grade-level clusters of the CCSS. The EEs provide a bridge for students with significant cognitive disabilities to the CCSS. The EEs are not intended as a reinterpretation of the CCSS; rather, they were developed to create a bridge between the CCSS and challenging achievement expectations for students with significant cognitive disabilities. The order in which the EEs are listed is a direct reflection of the order in which the CCSS are listed. The order is not intended to convey a sequence for instruction; rather, it illustrates progress across years. In the tables, the left column contains the CCSS grade-level clusters and indicators, the middle column contains the EE linked to them, and the right column contains the Range of Complexity Examples for each EE (as demonstrated on the previous page). Each EE and Range of Complexity Example completes the phrase “Students will”

CCSS marked with an (+) are advanced standards and are not included in this document as it was determined by the stakeholder group that students of this population would not be accessing the curriculum at this advanced level and writing Essential Elements to this level would be unnecessary. Also, if it appears that a standard has been omitted in the high school grades, it is an advanced standard.

NOTE: N/A is used if it was determined by the stakeholder group that the content of the CCSS could not be addressed.

Bullets denote descriptions of the range of complexity for the content related to the essential element.

Examples clarify certain components of EEs. The provided examples are illustrative, not exhaustive. They are intended to provide a range of ways in which a student may demonstrate progress toward the essential element and beyond.