REACHING EVERY LEARNER

Using WA-AIM Access Points in Inclusive Education for Access and Progress in Grade Level Standards for Students with Significant Cognitive Disabilities

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Washington Office of Superintendent of PUBLIC INSTRUCTION

Inclusionary Practices Technical Assistance Network

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INTRODUCTION

All students are general education students and are entitled to have access to and make progress in grade level learning standards through general education curriculum.

The Washington Access to Instruction & Measurement (WA-AIM) alternate assessment is a statewide accountability assessment for students with significant cognitive disabilities that measures a student's progress in grade level standards in the areas of mathematics, English language Arts (ELA) and science. The WA-AIM measures students' knowledge and skills in grade level standards across a continuum of Access Points derived from the standards. These Access Points, found in the WA-AIM Access Point Frameworks, provide one model for how educators can adjust the depth, breadth and complexity of standards to support students' access and progress in grade level learning, especially for students who take the alternate assessment.

It is educator practice to assess where students are and then tailor instruction to deepen a student's understanding related to the learning standards. The standards within the WA-AIM Access Points are **not** intended to be the sole standards used for instructional planning but rather demonstrate one approach to adapting instruction to meet the needs of a student and deepen their learning towards grade level standards in all content areas and across all learning standards. Furthermore, a student who is identified as taking the alternate assessment may access grade level standards at Access Points that are more or less complex. Therefore, there should not be a default practice of beginning with a specific access point complexity when a student is identified as needing the alternate assessment.

This resource is composed of:

- An elementary and secondary case study for ELA and Mathematics which:
    - Provide a sample learning progression that combines the Access Points identified within the WA-AIM Access Point Framework, with an example of a further complexity level and the grade level standard
    - Unpack methods of teaching the standard for all students within the general education classroom
    - Walk through examples of measuring student understanding across complexity levels of the standard for students with significant cognitive disabilities
    - End with a one-page expanded example learning progression, that unpacks complexity and example success criteria and instructional strategies across complexity levels
- Two Team Unit Planning Exercise Case Studies also demonstrate how the Team Unit Planning Exercise Template can be used to enhance access and progress of students with significant cognitive disabilities in the grade level standards within a unit.

The Reaching Every Learner, Companion Tools is an additional resource that is published separately to provide easy download and use of the two tools featured within the case studies:

- A blank Expanded Learning Progression template
- A blank Team Unit Planning Exercise template

The development of this resource assumes several contextual factors are in place for students who take the alternate assessment:

1. Students who take the alternate assessment have access to high-quality instruction in a general education classroom with their grade-level peers.
2. General education teachers collaborate with others to ensure accessible instructional design and materials for all students from the start, deliver high quality instruction, and assess all students for learning.
3. Special education teachers plan, deliver, and train others to assist others in delivering specially designed instruction to support students with disabilities to make progress in the general education curriculum.

ELEMENTARY ELA CASE STUDY

4th Grade Reading Standard

What are the students learning?

Grade level standard: RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

Example Learning Progression for Elementary ELA:

WA-AIM Access Points			Teacher adjusted	Grade Level Standard
Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student will identify similarities between two representations of a story.	Student will identify differences between two representations of a story.	Student will compare and contrast two representations of a story.	Student will explain how the similarities and differences between two representations of a story change the way we understand a story.	RL.4.7: Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

Educator adapts instruction to meet the needs of students and deepen learning toward grade level standard

How could I teach this standard in general education to all students?

- **Anchor Text:** The entire class will use the anchor text *The Lightning Thief* by Rick Riordan, along with its film adaptation *Percy Jackson & the Olympians: The Lightning Thief* (2020). After reading a section from the book, watch the corresponding film clip and engage in a discussion about the similarities and differences between the two versions. Learn more about accessing grade-level text in this TIP Sheet.
- **Venn Diagram Study**: To create a deeper understanding of the difference between how a story is presented in a book versus video, use a Venn diagram to compare what is presented through the story and what we learn through the movie. Learn more about graphic organizers in this TIP Sheet.
- **Grand Conversations:** To explore the connection between an illustration and the story's text more deeply, engage in a grand conversation with a small group or the whole class. Questions might include:
    - What do you see in this picture?
    - Look at the illustration of the character. What do you see? Let's listen to what their words say. How did the author describe the character?

    - What do you know about the setting from the illustration?
    - Can you tell how the character is feeling by the illustration?
- **Think Aloud:** As you read texts aloud, think aloud about how you might compare the illustrations in the text with the words from the story. Talk aloud about what you see in each picture and how it gives you additional insight into the characters in the book. Talk about how in picture books, the author or illustrator sometimes uses illustrations, rather than words, to convey problems/solutions, settings, and characters.

How could I measure understanding of the standard for students with significant cognitive disabilities?

Start with how you measure student understanding for all students and adapt from there. For example, if you assigned the whole class a Venn diagram to fill in based on the story, you could do the same for a student who has significant cognitive disabilities. For students who might need alternatives to individual completion of the Venn diagram, their task may involve multimodal assessments that could include interviews or conferences with students to gauge their understanding.

If the student requires additional support, use the WA-AIM Access Point Framework to scaffold to the standard.

Further Complexity towards the Grade-Level Standard

It is important to give the student an opportunity to demonstrate their understanding of the grade level standard. However, it is likely they will require some accommodations and possibly slight modifications in how it is assessed. In this case, two options might be appropriate.

First, the team may increase the amount of scaffolding or accommodations than most students already get on the assessment, and/or provide the student an opportunity to demonstrate skills in the general standard with a focus on the essential components and greater instructional scaffolding. For example, in this lesson, the student may be able to meet the grade-level standard (e.g. identify similarities and differences between two story representations; the More Complex Access Point and further explain how these similarities and differences change the way we understand the story.) given:

- More accommodations compared to other students (e.g., written answer choices instead of open response questions, more prompting)
- Additional scaffolding (e.g., multiple choice, fill in the blank, word bank)

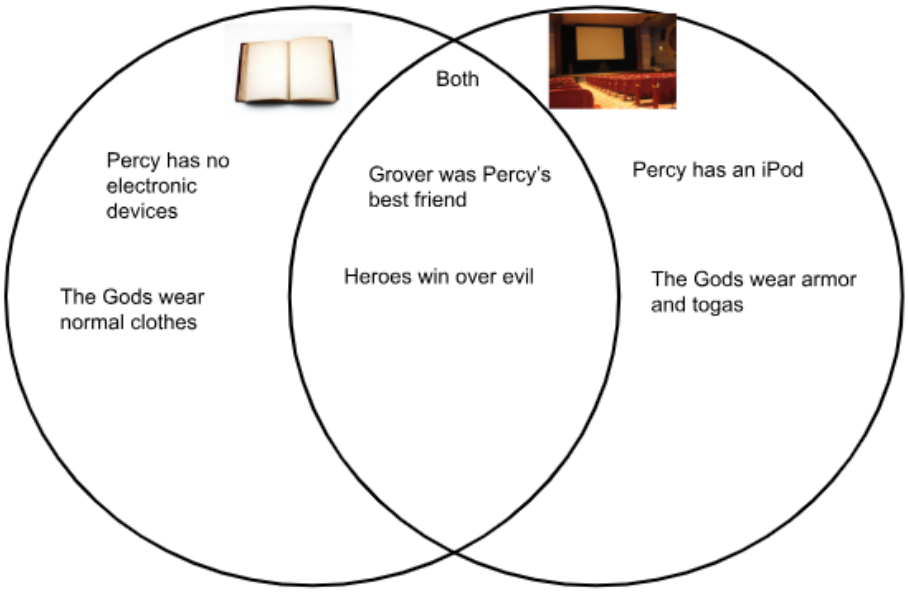
After completion of the Venn diagram, the student may use sentence stems and a word bank to communicate how the similarities and differences changed how they understood the story.

One similarity/difference that changed the way we understood the story in the movie was the way the Gods dressed in the movie (wearing armor and togas) versus the book (normal clothes). This changed how I understood the story because the Gods did not blend in with regular people like they did in the book.

If the student requires additional scaffolding, consider the More Complex Access Point.

More Complex (WA-AIM Access Point)

To assess the student's more complex demonstration of the standard, have them compare and contrast the two versions of the story using the communication mode and supports that work best for them.



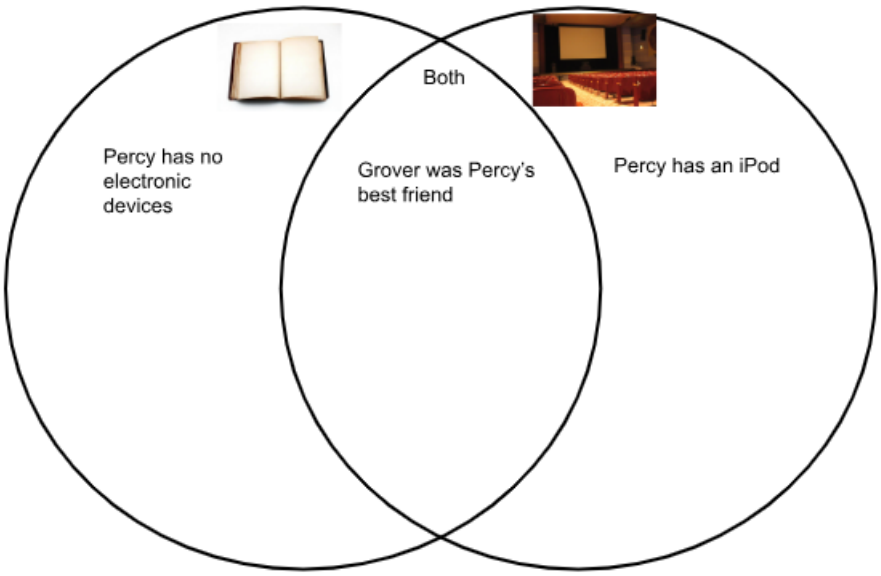
If the student requires additional scaffolds beyond the More Complex Access Point, consider using the Intermediate Access Point

Intermediate (WA-AIM Access Point)

To assess the student's intermediate Access Point understanding of the standard, you might ask them to identify one difference between two versions of the story. If communication serves as a barrier, you might give the student options to choose from.

Ask, "Which one of these was a difference between the book and the movie?" If needed, read each answer aloud. Ensure the student can say, touch, or move the answer to the correct place on the Venn diagram.

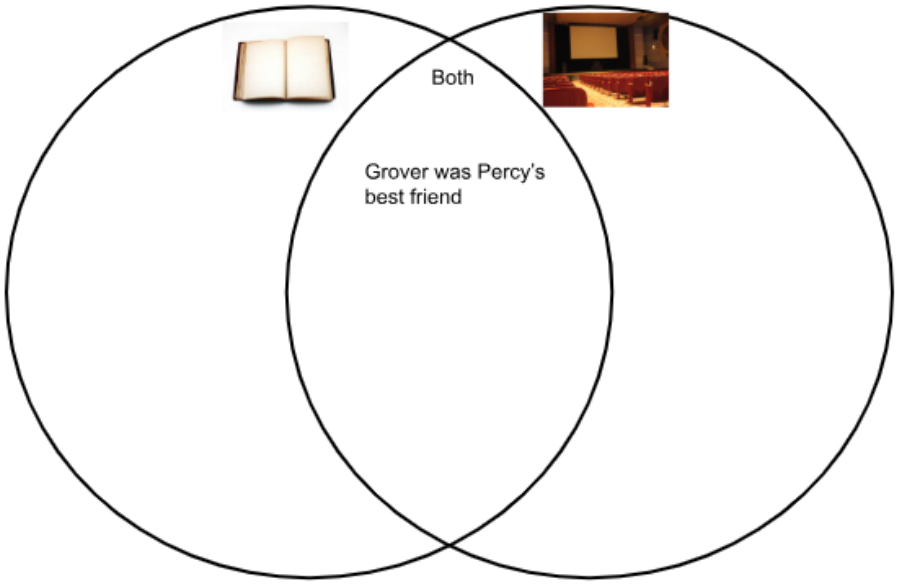
1. In the book, the main character's name is Percy. In the movie, the main character's name is Patrick.
2. In the book, Percy has no electronic devices since they attract monsters. In the movie, Percy has an iPod. (correct answer)
3. In the book, there is no Ares. In the movie, Ares is the main character.



If the student continues to require additional scaffolding given the Intermediate Access Point, consider the Less Complex Access Point.

Less Complex (WA-AIM Access Point)

The Less Complex Access Point for this standard is to identify similarities. Start by assessing similarities between the book and the film. If communication serves as a barrier, you might give the student options to choose from. If they have difficulty reading text, visuals are always a great option to increase accessibility.



Ask, "Which one of these is a similarity between the book and the movie?" If needed, read each answer aloud. Ensure the student can say, touch, or move the answer to the correct place on the Venn diagram.

1. **Grover was Percy's best friend. (correct answer)**
2. Grover is sweet and caring.
3. Grover likes to gamble.

If the student answers incorrectly, say "Oh, that's not right. Let's try again, which one was similar?" That means both the movie and the book were the same in this way.

Reducing Barriers for Learners who have Significant Cognitive Disabilities in Large Group Lessons

Make reducing barriers an ongoing practice embedded in the instructional process - take a few minutes to think about your process! Is there a barrier related to:

- **Interest or engagement?** Think about how to incorporate the student's lived experiences, culture, and interests in the literature you select and examples you use to highlight key ideas.
- **Background knowledge?** Think about highlighting key ideas (e.g., similarities and differences) and define key vocabulary (e.g., compare, contrast).
- **Showing what they know?** Think about having options for how students use learning tools (e.g., graphic organizers) and technology to communicate.

For example, one possible barrier is if there is only one way to learn the story of Percy Jackson (by reading the book). Ideas to reduce this barrier could include classroom educators offering an audiobook or adapted book. Other accessibility considerations could include:

- Prompting students to use or ask for the accommodations that they need, such as audiobooks.
- Task paraprofessionals with ensuring student's assistive technology is available at all times, if appropriate.
- Offer digital formats so the size of text, contrast, or other visual content can be adjusted.
- Offer alternatives to text such as objects, partial objects, and tactual representations. For

example, a Venn diagram with objects.

- Use text alternatives such as captions or automated speech-to-text or text-to-speech software.
- Follow accessibility standards (NIMAS, DAISY, etc.) when creating digital text.

Expanded Learning Progression for Elementary ELA

	WA-AIM Access Points			Teacher Adjusted	Grade Level Standard
	Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student Skill	Student will identify similarities between two representations of a story.	Student will identify differences between two representations of a story.	Student will compare and contrast two representations of a story.	Student will describe how the changes between the descriptions and directions in two versions of a story help or change how the story is understood.	**RL.4.7** Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.
Complexity Details	• Similarities only	• Differences only	• Similarities and differences	• Similarities and differences • Describe how similarities and differences change how the story is understood	• Descriptions and directions in two versions of a story • Describe how each format of a text, story, or drama reflects themes and emotions through descriptions and directions
Success Criteria Ex:	• Identify multiple similarities	• Identify multiple differences	• Sort similarities and differences into a Venn Diagram	• Identify changes in descriptions and directions between two versions of a story • Identify how the changes impact the reader	• List changes in descriptions and directions between two stories • Cite where those changes are in each text
Instructional Strategy Examples	Visual Supports • Concrete objects from the story Scaffolds • Highlighted text with visuals Technology • AAC with vocabulary	Visual Supports • Color-coded Venn diagram with raised lines Scaffolds • Select passages from the text to use Technology • Use of technology to adjust reading levels of text	Visual Supports • Choice cards (examples/ non-examples) Scaffolds • Prompting and fading • Peer supports Technology • Use of tablet to drag and drop choices into graphic organizer	Visual Supports • Graphic organizer with visual supports Scaffolds • Structured responses • Sentence stems • Word banks Technology • Read-aloud and speech-to-text features	Visual Supports • Graphic organizer Scaffolds • Modeling identification of changes in description or direction • Flexible grouping Technology • Hardcopy, audiobook, and e-book formats

SECONDARY ELA CASE STUDY

9th Grade Writing Standard

What are the students learning?

Grade level standard: W.9-10.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.

A. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.

Example Learning Progression for Secondary ELA

WA-AIM Access Points			Teacher adjusted	Grade Level Standard
Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Given a topic or a text, student will identify a claim and counterclaim.	Given a topic or text, student will write one claim and one counterclaim.	Student will write a claim about a topic including supporting details, and write a counterclaim.	Student will write an argument that includes a claim, supporting details and evidence from a text, and a counterclaim and rebuttal.	W.9-10.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. A. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.

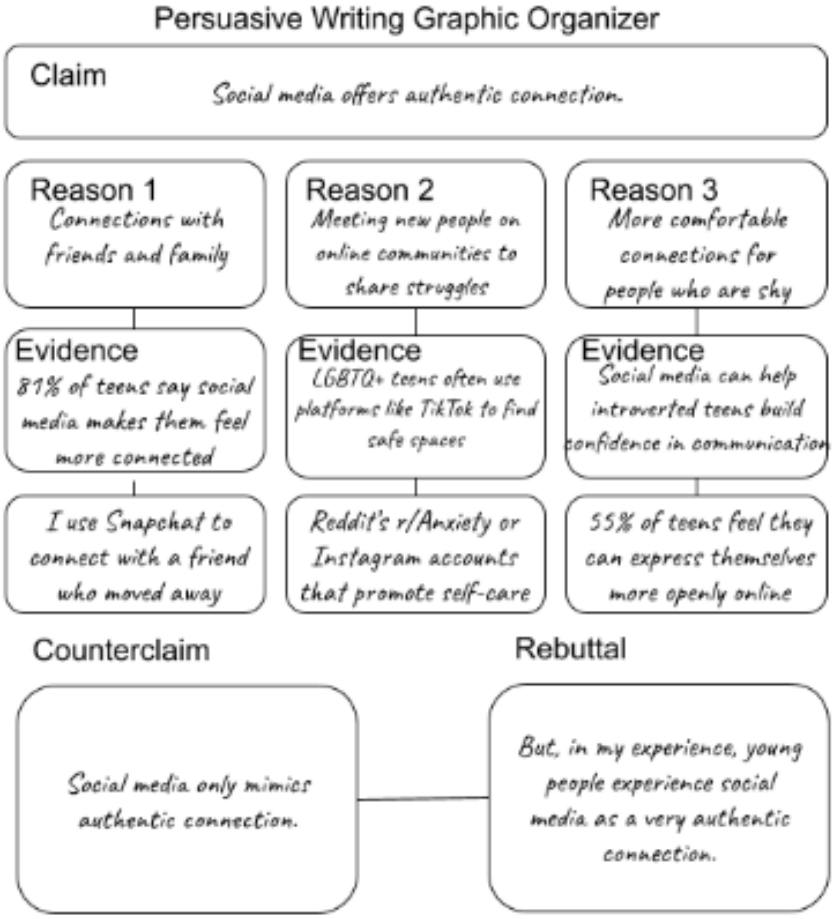
Educator adapts instruction to meet the needs of students and deepen learning toward grade level standard

How could I teach this standard in general education to all students?

For the purposes of this document, the Secondary ELA learning progression focuses on a single standard. However, it is common and best practice to bundle standards [for example, teaching how to write an argument (W.9-10.1) as well as engaging in the writing process (W.9-10.5), using appropriate grammar conventions (W.9-10.5)] when designing units and learning experiences so that a student is learning within context.

- **Writers' Workshop**: Each Writer's Workshop lesson may follow a similar basic format:

    - Mini-Lessons are quick and direct lessons that address the particular and immediate needs of students. These mini-lessons usually last between 5 and 15 minutes and can be on topics such as grammar, spelling, effective word choice, organization of ideas, choosing and narrowing down your topic area, or elaborating on your idea and providing detail.
    - Status of the Class is an informal evaluation or identification of what each student is writing. This update usually lasts less than 5 minutes.
    - Writing Time allows students to apply the topics addressed in a mini-lesson, work independently and in groups, and provides time for students to conference with peers or the teacher about their writing. Time allotted for writing is based on students' abilities and engagement with the task, but students should receive daily extended time to write.
    - Sharing occurs at the end of the lesson when students read or post their work and get feedback from the teacher and their peers. Students usually receive between 5 and 15 minutes to share.
- **Mnemonic Visual Metaphor:** Using simple visuals such as an "argument burger" or debate scale to show:
    - Claim (what you believe)
    - Evidence (facts, examples)
    - Counterclaim
    - Rebuttal
- **Genre study:** Read several mentor texts to identify structures to use in their own writing. Use these structures to build **graphic organizers** as a class to organize and structure student thoughts and research



How could I measure understanding of the standard for students with significant cognitive disabilities?

Start with how you measure student understanding for all students and adapt from there. For example, if you assigned the whole class a persuasive writing assignment, you could do the same for a student who has significant cognitive disabilities. For students who might need alternatives to individual completion of a writing task, their task may involve multimodal assessment that could include interviews or conferences with students to gauge their understanding.

One important consideration, especially for a writing assignment, is a student's communication modality. The purpose of writing is to authentically communicate ideas and exhibit understanding of a topic. This could require creative problem-solving to ensure that students have authentic opportunities to respond to learning prompts and assignments using various forms of communication.

If the student requires scaffolds to support their engagement, you might give them fewer paragraphs altogether and use the WA-AIM Access Point Framework to design scaffolded supports and prompts. If a student needs scaffolds at a certain Access Point for one standard, don't assume they will need this level of scaffolding for every other standard.

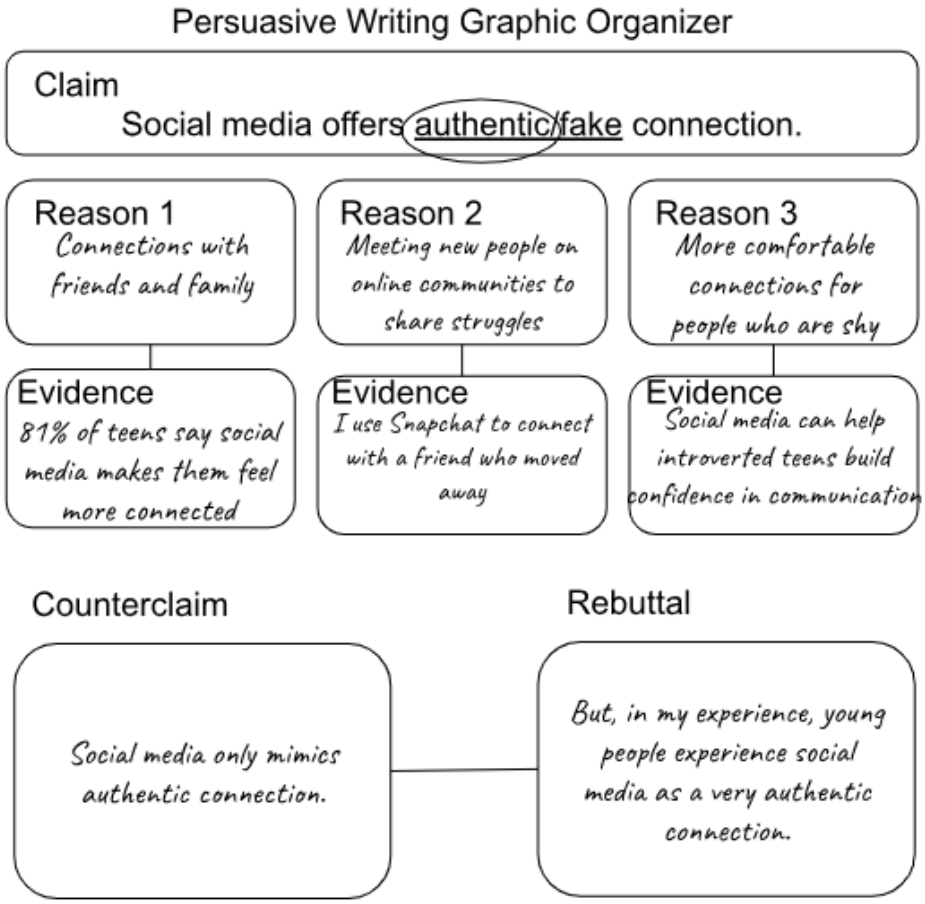
Further Complexity towards the Grade Standard

It is important to give the student an opportunity to demonstrate their understanding of the grade

level standard. It is possible a student may be able to do more than the WA-AIM Most Complex Access Point. It is essential to challenge them to reach toward the grade level content standard. However, it is likely they will require some accommodations and possibly modifications in how it is assessed. In this case, two options might be appropriate.

1. Increase the amount of scaffolding or accommodations that most students already get on the assessment (e.g., multimodal assessment that includes flexibility in response options, for example, picture response versus written), and/or
2. Provide the student an opportunity to demonstrate skills in the grade-level standard with a focus on the essential components and greater instructional scaffolding.

With this standard, the student may be able to develop a claim about a topic including supporting details, a counterclaim (the More Complex Access Point) with fewer accommodations, and identify more direct connections with reasons and evidence (the Grade Level Standard) with scaffolding.

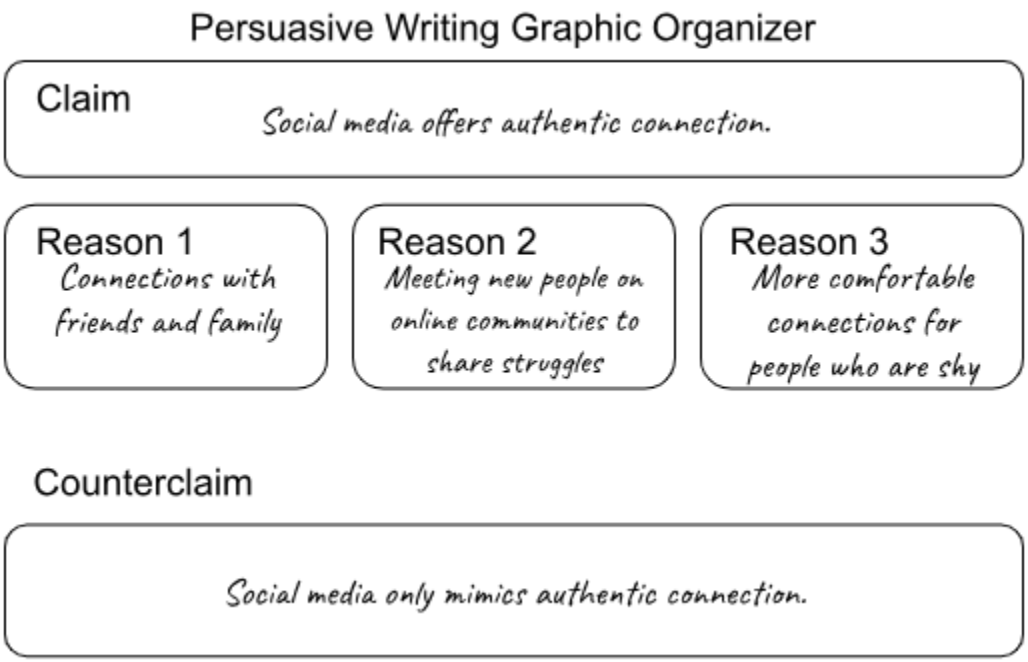


If the student requires additional scaffolding, consider the More Complex Access Point.

More Complex (WA-AIM Access Point)

To measure the student's more complex demonstration of the standard, the Access Point states assessing their ability to write a claim about a topic including supporting details and write a counterclaim. "Supporting details" is not prescriptive, so students could write about their claim, 3 reasons, and a counterclaim. They could also write about 2 reasons, evidence for each reason, and a counterclaim.

A simplified graphic organizer focused on the More Complex Access Point may look like this:

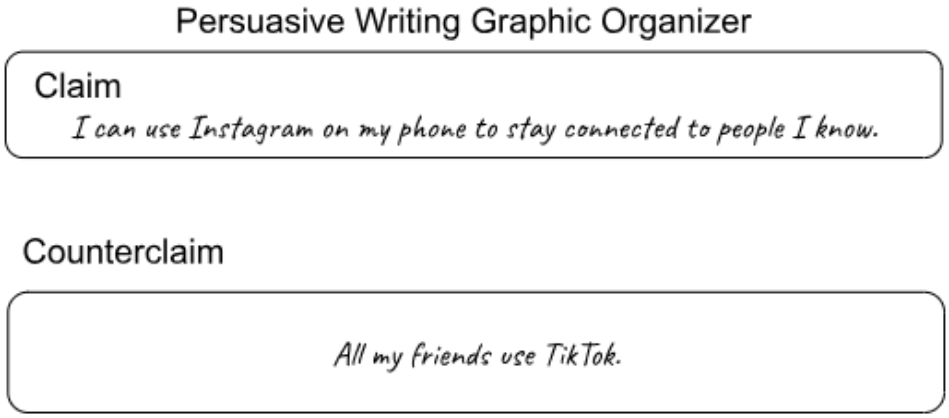


If the student requires additional scaffolding, consider the Intermediate Access Point.

Intermediate (WA-AIM Access Point)

Then, to measure the student's Intermediate Access Point the student should write one claim and one counterclaim, given a topic or text.

Given accommodations and communication support, their graphic organizer may look something like this:



If the student requires additional scaffolding, consider the Less Complex Access Point.

Less Complex (WA-AIM Access Point)

The Less Complex Access Point for this standard is to identify a claim and counterclaim. An example of

this could be giving the student some option sentences and having them identify a claim they want to make and then a counterclaim that aligns with the claim. If the topic at hand was social media, the student would identify their claim.

They may be provided with the following choices for claims:

- *I can use Instagram on my phone to stay connected to people I know.*
- *Social media can be harmful when used in place of authentic connection.*
- *Social media can contribute to issues with self-image.*

Depending on which claim the student chooses, give an array of counterclaim choices for the student to select from that align with the original claim they chose. For example, if they selected:

"*I can use Instagram on my phone to stay connected to people I know.*"

They would need to identify a counterclaim that aligned with their selected claim.

Counterclaim choices

- *All of my friends are on TikTok*. (correct)
- *Social media has lots of ads for unhealthy choices.*
- *Instagram can be used to block people.*

Reducing Barriers for Learners who have Significant Cognitive Disabilities in Large Group Lessons

Make reducing barriers an ongoing practice embedded in the instructional process - take a few minutes to think about your process! Is there a barrier related to:

- **Interest or engagement?** Allow students to select topics that resonate with their interests or cultural backgrounds. For example, they could choose to address a social issue they are passionate about, such as climate change or social justice. Consider posing low-stakes prompts that all students would have an opinion about (e.g. "Is pineapple on pizza acceptable?"). Provide collaborative tasks based on interest-based prompts and allow them to choose what group to work with. This choice can motivate students and make the lesson feel more meaningful.
- **Background knowledge?** Think about how to highlight key ideas (e.g. similarities and differences) and define key vocabulary (e.g. claim, evidence, counterclaim, rebuttal). Consider how visuals might be incorporated (e.g. "argument burger"), and allow use of audio, video and written representation. This allows students to grow their understanding without stigma.
- **Showing what they know?** Consider how students can show what they know (especially those who require AAC or other communicative supports). Provide tools such as graphic organizers, writing platforms that can use text to speech and word prediction, speaking, role playing or acting, drawing and other tech tools.

Writing in a traditional sense with paper and pencil (or even a computer and keyboard) can be full of barriers for many students with and without disabilities. Be sure to have clear goals so that you know where flexibility can be introduced into your assignments. For example, in this standard, the goal is for students to write arguments to support claims, so flexibility could be introduced in multiple ways, including:

- How students write (e.g., paper/pencil, keyboard, speech-to-text technology, scribe, use of sentence starters and/or word banks, emojis or symbols for students with limited literacy,

verbal peer feedback and collaborative writing, digital annotation)
- Topics students choose to write about (e.g., social media, climate change, cell phone use in schools, sports, foods)
- Tiered graphic organizers (e.g., less complex claim + reason; advanced: full structure)
- Sentence starters, word bank with transition words and academic terms, sentence strips or visuals to organize ideas

Use these Inclusive Strategies to help reduce barriers[1].

[1] The Inclusive Big Ideas were adapted from resources created by the NCSC Project , a federal grant from the US Department of Education (PR/Award #: H373X100002), However, the contents do not necessarily represent the policy of the US Department of Education and no assumption of endorsement by the Federal government should be made.

Expanded Learning Progression for Secondary ELA

	WA-AIM Access Points			Teacher Adjusted	Grade Level Standard
	Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student Skill	Given a topic or a text, student will identify a claim and counterclaim.	Given a topic or text, student will write one claim and one counterclaim.	Student will write a claim about a topic including supporting details, and write a counterclaim.	Write a claim about a topic including supporting details, a counterclaim, and identify direct connections with reasons and evidence	W.9-10.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence. A. Introduce precise claim(s), distinguish the claim(s) from alternate or opposing claims, and create an organization that establishes clear relationships among claim(s), counterclaims, reasons, and evidence.
Complexity Details	• Identify a claim • Identify a counterclaim	• Writing a claim • Writing a counterclaim	• Write a claim with supporting details • Write a counterclaim	• Write a claim with supporting details and evidence • Write a counterclaim and rebuttal	• Write an argument to support claims, including counterclaims, reasoning, and evidence
Success Criteria Ex:	• Given examples and nonexamples, select one claim and one aligned counterclaim on a topic	• Developing one claim and one counterclaim on a topic in a simplified graphic organizer	• Claim, 3 supporting details, and counterclaim input into graphic organizer	• Claim, supporting details, evidence, and counterclaim/rebuttal in graphic organizer	• Written paragraph or essay
Instructional Strategy Examples	Visual Supports • Claim/counter claim cards with pictures Scaffolds • Color-coded materials • Limited choice array of clear examples Technology • AAC device intensive instruction • Simple visual digital sorting program	Visual Supports • Simple graphic organizer • Picture topic cards to generate claims Scaffolds • Pre-teaching topics • Sentence frames Technology • Video of topic and issues • AAC device • Text-to-speech tools	Visual Supports • 3 column organizer for claim, supporting detail, counterclaim • Photos about the topic Scaffolds • Sentence starters • Word banks Technology • Word processing with predictive text • Digital choice board to select claim components	Visual Supports • Organizing templates Scaffolds • Checklist for building and organizing argument components • Paragraph frame with sentence starters Technology • Adaptive keyboards • Touchscreen tablets	Visual Supports • Modeled example with color coded claims, counterclaims and evidence Scaffolds • Peer reviewer checklists to evaluate claim precision, evidence sufficiency and reasoning. • Rubric Technology • Use of speech-to-text or text-to-speech • Word processing software with spelling and grammar check • Digital citation tool

ELEMENTARY MATH STANDARDS CASE STUDY

4th Grade Mathematics Standard for Number and Operations - Fractions

What are the students learning?

Grade level standard: 4. NF.1. Explain why a fraction *a/b* is equivalent to a fraction *(n x a)/(n x b)* by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

Example Learning Progression Elementary Math

WA-AIM Access Points			Teacher adjusted	Grade Level Standard
Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student will identify real-world objects that represent one-half or one whole.	Student will identify models of one-half and one-fourth.	Student will identify or create models that are equivalent to one-half (2/4, 3/6, 4/8, 5/10).	Using tangible fraction models, explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b).	4. NF.1. Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.

Educator adapts instruction to meet the needs of students and deepen learning toward grade level standard

How could I teach this standard in general education to all students?

- **Use Visual Representation Tools** - Support opportunities to customize the display of information. To help students understand equivalent fractions, you could incorporate visual fraction models, such as pie charts, number lines, or area models. Allow students to choose the model that resonates with them most. For instance, some students might prefer using colored paper to create fraction circles, while others could benefit from digital tools that visualize fractions (e.g., National Library of Virtual Manipulatives). This customization can help them better perceive and understand the concept of equivalence.
- **Interactive Group Activities** - Foster collaboration, interdependence, and collective learning. Organize hands-on group activities where students work together to create equivalent

fractions using manipulatives like fraction bars or blocks. Encourage them to explain their reasoning to each other, reinforcing their understanding through collaboration. For example, one group could explore how 1/2 and 2/4 are equivalent by using blocks to create two different models, discussing how the number and size of the parts differ but the whole remains constant.

- **Diverse Methods of Assessment -** Use multiple media for communication. To assess understanding of equivalent fractions, provide students with various options for demonstrating their learning. Some might choose to create a video explaining the concept, while others could write a story that incorporates equivalent fractions or draw a comic strip. This variety allows students to express their understanding in a way that feels authentic and comfortable to them.

How could I measure understanding of the standard for students with significant cognitive disabilities?

Start with how you measure student understanding for all students and adapt from there. For example, if students are taking a test with various tasks and fractions represented, educators may consider simplifying the tasks according to the fractions represented in the Access Points (one-half and one-fourth, for example.

Further Complexity towards the Grade-Level Standard

In some cases, students may need very little scaffolding to be successful with a standard, even when they take the alternate assessment. If a student needs scaffolding, consider ensuring they have access to needed accommodations and support when student understanding is measured. For example, given the following questions, they may benefit from sentence stems and word banks.

Use a visual fraction model (such as a drawing of fraction bars or circles) to show that 4/5 is equivalent to 8/10. Explain how the number and size of the parts change but the overall value stays the same.

Since I *(multiplied)* **both the numerator and denominator of 4/5 by** *(2)* **to get 8/10, the fractions are** *(equivalent)*. **The size of the individual pieces** *(changed)*, **but the overall fraction represents the** *(same)* **amount.**

Word bank: multiplied, divided, added, subtracted, changed, same, different

Marcus says that 2/6 is equivalent to 4/12. Show whether he is correct using multiplication and explain your reasoning.

2/6 and 4/12 are/are not (circle one) equivalent fractions because_____
_____.

Further scaffolds could include limiting the fractions that a student would be assessed on to 1/2 and 1/4 for example, but the problems would be the same for all students.

If the student requires additional scaffolding, consider the More Complex Access Point.

More Complex (WA-AIM Access Point)

To assess the student's demonstration of the More Complex Access Point standard: Student will

identify or create models that are equivalent to one-half (2/4, 3/6, 4/8, 5/10).

How does measuring understanding of the grade level standard look like for all students? Have this be your starting point and adapt from there, if needed. For example, if students are taking a multiple-choice test with various fractions represented, educators may consider simplifying the assessment according to the fractions represented in the Access Points (one-half and one-fourth, for example).

Teachers might use multiple representations of fraction models (area, bar, and set models), however, these need to be explicitly and systematically taught.

In this Access Point, students may identify or create fraction models that are equivalent to one-half. Any of the ideas presented in the Less Complex Access Point could be used with any fractional model type to meet this portion of the More Complex Access Point[2].

To challenge students further to create fraction models that are equivalent to one-half, educators might:

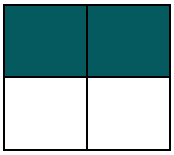
A. Use an area model representing 2/4 and have the student color in 1/2 of the fractional parts.
B. Use a set model and give the student 8 dual-colored counters, and ask the student to show 1/2 (or 4/8).

If the student requires additional scaffolds beyond the More Complex Access Point, consider using the Intermediate Access Point.

Intermediate (WA-AIM Access Point)

Student will identify models of one-half and one-fourth. To assess the intermediate Access Point, an educator could use fraction models such as area models, set models, and length models representing one-half and one-fourth.

Area model



Set model

Length model

[2] see National Center on Intensive Intervention's video Teaching Fractions Using Manipulatives

Various activities to assess the student could include:

A. From a choice of 3 or 4, ask them to touch the object that shows _____ (one-half or one-fourth).
B. When presented with an object, ask, is this one-half or one-fourth? (they may even be given a one-half card and one-fourth card to use to communicate)
C. Given a variety of models, some halves and some fourths, ask the student, "please hand me one-half." Repeat with the models you have.

If the student continues to require additional scaffolding given the Intermediate Access Point, consider the Less Complex Access Point.

Less Complex (WA-AIM Access Point)

The Less Complex Access Point for this standard is to "Student will identify real-world objects that represent one-half or one whole."

To most meaningfully measure student learning for this Access Point aligned to the standard, students with significant cognitive disabilities can demonstrate their understanding using real-world objects. Any easily divided object can be used (for example, paper, flower, leaf, apple, orange, pizza, cookie) in wholes or cut into halves.

Various activities to assess the student could include:

A. From a choice of 3 or 4, ask them to touch the object that shows _____ (one-half or one whole).
B. When presented with an object, ask, is this one-half or one-whole? (they may even be given a one-half card and one whole card to use to communicate)
C. Given a variety of models, some halves and some fourths, ask the student, "please hand me one-half." Repeat with the models you have.

With all these examples, providing instruction before measuring student learning is important. Once the measurement has begun, you can decide whether to provide corrections or not, but remain consistent throughout, and ensure that you record data on their first response before you provide any prompts.

Reducing Barriers for Learners who have Significant Cognitive Disabilities in Large Group Lessons

Make reducing barriers an ongoing practice embedded in the instructional process - take a few minutes to think about your process! Is there a barrier related to:

- **Interest or engagement?** Think about how to incorporate the student's lived experiences, culture, and interests in your mathematical models and problems.
- **Background knowledge?** Think about how to highlight key mathematical ideas (e.g., equivalence) and define key vocabulary (e.g., wholes, halves, equivalent).
- **Showing what they know?** Think about having options for how they use learning tools (e.g., graphic organizers) and technology to communicate.

For example, one possible barrier is if there is no flexibility in how the content is represented (e.g., the content is represented using only paper models or manipulatives and the student has little or no use of their hands).

Ideas to reduce this barrier could include classroom educators supporting students to:

- Count the parts of fractions or decimals using a step-by-step process which progresses through numbers; the student scans an array of possible options and uses a switch to select the number to identify the numerator
- Use computer representation of fractions that can be manipulated with a switch
- Place fraction representations on a slant board or eye gaze board
- Create a grid on a large surface on the floor so that the student can walk over or ride over in wheelchair

Use these Inclusive Strategies to help reduce barriers[3].

[3] The Inclusive Big Ideas were adapted from resources created by the NCSC Project , a federal grant from the US Department of Education (PR/Award #: H373X100002), However, the contents do not necessarily represent the policy of the US Department of Education and no assumption of endorsement by the Federal government should be made.

Expanded Learning Progression for Elementary Math

	WA-AIM Access Points			Teacher adjusted	Grade Level Standard
	Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student Skill	Student will identify real-world objects that represent one-half or one whole.	Student will identify models of one-half and one-fourth.	Student will identify or create models that are equivalent to one-half (2/4, 3/6, 4/8, 5/10).	Using tangible fraction models, explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b).	4. NF.1. Explain why a fraction a/b is equivalent to a fraction (n x a)/(n x b) by using visual fraction models, with attention to how the number and size of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.
Complexity Details	• Real-world objects representing fractions one-half or one whole	• Fractional models one-half and one-fourth	• Fractional models equivalent to one-half	• Fractional models of various sizes • Structured mathematical discourse	• Fractional models of various sizes • Mathematical discourse
Success Criteria Ex:	• Matches fractions (one half and one whole) to appropriate real-world objects	• Matches fractions (one half and one fourth) to appropriate real-world objects	• Identifies and creates fractions equivalent to one-half	• Uses tangible models to explain equivalent fractions in terms of the number and size of fractional parts	• Uses visual models to explain equivalent fractions in terms of the number and size of fractional parts • Generates equivalent fractions independently
Instructional Strategy Examples	Visual Supports • Real-world objects (one-half or one-whole) Scaffolds • Pre-made fraction cards with picture support Technology • Virtual manipulatives	Visual Supports • Fraction cards Scaffolds • Receptive or expressive identification of fractions Technology • Virtual manipulatives	Visual Supports • Examples/ non-examples of fraction models equivalent to one-half Scaffolds • Simpler fractions, moving to more complex • Prompting and fading Technology • AAC with math vocabulary	Visual Supports • Tangible or visual fraction models Scaffolds • Explicit instruction in various fractional models • Structured mathematical justifications • Simplified fractions Technology • Virtual manipulatives	Visual Supports • Visual fraction models • Visual vocabulary cards Scaffolds • Explicit instruction in various fractional models (area, set, length models) • Modeling of mathematical justifications Technology • Virtual manipulatives • Math modeling software

SECONDARY MATH CASE STUDY

Mathematics Standard for Algebra 1

What are the students learning?

Grade level standard: HSE-CED-A.1 - Create equations and inequalities in one variable and use them to solve problems.

Example Learning Progression for Secondary Math

WA-AIM Access Points			Teacher adjusted	Grade Level Standard
Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student will identify an algebraic equation involving addition and subtraction (up to 20) that represents a modeled real-world situation.	Student will solve a one-step algebraic equation involving addition and subtraction representing a real-world situation	Student will write and solve a one-step algebraic equation representing a real-world situation.	Create equations in one variable and use them to solve problems in real-world situations (not yet inequalities)	HSE-CED-A.1 - Create equations and inequalities in one variable and use them to solve problems.

Educator adapts instruction to meet the needs of students and deepen learning toward grade level standard

How could I teach this standard in general education to all students?

- **Concrete or representations**: Use manipulatives such as counters or blocks to visually demonstrate how to form equations. For instance, if students are solving for x in the equation x + 3 = 7, they could use blocks or algebra tiles to represent the equation physically. This helps students grasp the concept of balancing equations in a tactile or visual way.
- **Interactive technology**: Incorporate math software or apps that allow students to explore equations and inequalities through interactive activities. For instance, tools like Polypad Algebra Tiles allow students to represent and solve algebraic equations using virtual algebra tiles, balance scales allow them to explore equality and inequality, and Desmos enables students to manipulate equations in real-time and see the effects graphically. This can aid in understanding the relationship between algebraic expressions and their graphical representations.
- **Project-based learning:** Assign a project where students must investigate a real-world problem that can be modeled with equations or inequalities. Get creative! For instance, students could analyze data related to local environmental issues (like water usage) or even data related to their favorite athlete and create equations to represent their findings. This method encourages critical thinking and application of math in meaningful contexts.

- **Role-playing:** Create role-playing activities where students act out scenarios that require the use of equations or inequalities. For instance, they could simulate a market scenario where they negotiate prices using inequalities to express limits and budgets. This method makes the learning process dynamic and engages students' social skills.
- **Visual storytelling**: Encourage students to create a comic strip or storyboard that illustrates a problem involving equations or inequalities. By telling a story visually, they can deepen their understanding of the problem-solving process and the relevance of math in everyday life.

How could I measure understanding of the standard for students with significant cognitive disabilities?

Start with how you measure student understanding for all students and adapt from there. For example, if students are given word problems to build algebraic equations that they will then solve, start there for your students who have significant cognitive disabilities. If the student requires scaffolds to support their engagement, you might give them fewer word problems altogether and use the WA-AIM Access Point Framework to design scaffolded supports and prompts. If a student needs scaffolds at a certain Access Point for one standard, don't assume they will need this level of scaffolding for every other standard.

Further Complexity towards the Grade-Level Standard

Students may be able to do more than the WA-AIM Most Complex Access Point. In this case, it is essential to challenge them to reach toward the grade level content standard.

In this case, they may be solving equations and inequalities that look very similar to what is required in the grade-level curriculum; however, the equations may be simplified (e.g., only involving addition and subtraction) and the student may require the use of supportive strategies and materials. For example, this problem shows a mathematical problem that requires the student to build an algebraic equation and solve for a variable *x*.

Problem:

> Jordan has $45 saved up. They want to buy snacks and a bus ticket for a scouts trip. The total cost needs to be no more than $60. How much can Jordan spend on snacks? Let *x* represent the amount Jordan can spend on snacks.
>
> $45 + x \leq 60$

A student could use various strategies to solve for the inequality, including the use of a calculator, a hundreds chart, or number line.

If the student requires additional scaffolding, consider the More Complex Access Point.

More Complex (WA-AIM Access Point)

To measure the student's demonstration of the standard according to the More Complex Access Point, the student is required to not only solve the one-step algebraic equation but write it out as well. The More Complex Access Point says: "Student will write and solve a one-step algebraic equation representing a real-world situation."

Given the word problem:

> Jamie is at the store buying fruit. She picks up a bag of apples. Then, Jamie decides to return 2 apples to the shelf. Jamie has 12 apples left. How many apples did Jamie start with?

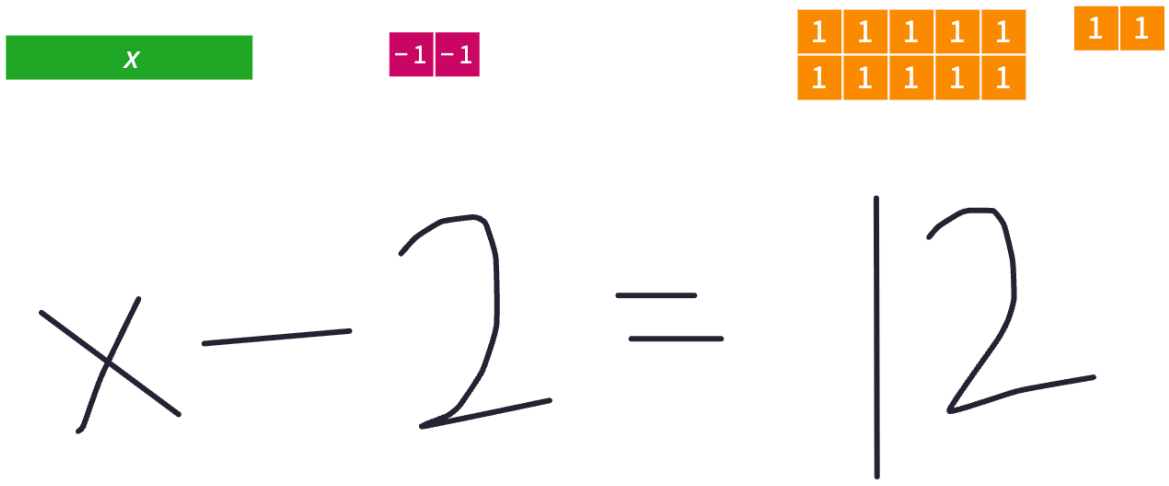
The student would need to write out the algebraic equation based on the word problem. This may involve them writing the equation without supports. It may also involve them putting pre-selected numbers and symbols together in an equation frame or selecting the equation from a choice of 3-5.

Equation frame example:

x	-	2	=	12

After the student develops an equation, they will then solve it. The student may use various strategies to solve the algebraic equation. For example, they could use more traditional problem-solving methods by balancing out the equation, using algebra tiles (either virtual or tangible), or act out various options for x to determine which one is correct.

Algebra tiles example:



[4]

If the student requires additional scaffolds beyond the More Complex Access Point, consider using the Intermediate Access Point.

Intermediate (WA-AIM Access Point)

To measure the student's Intermediate Access Point understanding of the standard, the WA-AIM Access Point says the "student will solve a one-step algebraic equation involving addition and subtraction representing a real-world situation." In this case, they can take the real-world situation from the More Complex Access Point and solve it to find out how many apples were in Jamie's first bag of apples. See the More Complex Access Point for ideas on options for solving the equation through balancing the equation, using algebra tiles, or by acting it out. Students may need repeated

[4] Virtual Algebra Tiles. Available at https://polypad.amplify.com/p#algebra

exposure to various strategies to be able to consistently solve algebraic equations.

Word Problem:

> Jamie is at the store buying fruit. She picks up a bag of apples. Then, Jamie decides to return 2 apples to the shelf. How many apples did Jamie start with?

Student Answer:

$x - 2 = 12$

If the student continues to require additional scaffolding given the Intermediate Access Point, consider the Less Complex Access Point.

Less Complex (WA-AIM Access Point)

The Less Complex Access Point for this standard is to "identify an algebraic equation involving addition and subtraction (up to 20) that represents a modeled real-world situation."

To measure this Access Point aligned to the standard, students with significant cognitive disabilities will need a modeled real-world situation. For example, take this word problem about a person at a grocery store.

Word Problem:

> Jamie is at the store buying fruit. She picks up a bag of apples. Then, Jamie decides to return 2 apples to the shelf. There are 12 pieces of fruit at the end. Which equation will help you find how many apples were in the bag to start?

Throughout the word problem, work with the student to act out the problem. This may include the use of real-world objects (e.g., apples), photos, or representations of objects (e.g., manipulatives). Students may build their algebraic equations in various ways, including writing, using an equation frame (example shown) with number and symbol cards, or using tools like algebra tiles (example shown).

If assessing the standard, you may also offer the student choices regarding which equation represents the word problem.

- $x + 4 = 2$
- $x - 2 = 12$ (correct answer)
- $2x + 4 - 6 = 10$

Reducing Barriers for Learners who have Significant Cognitive Disabilities in Large Group Lessons

Make reducing barriers an ongoing practice embedded in the instructional process - take a few minutes to think about your process! Is there a barrier related to:

- **Interest or engagement?** Think about how to incorporate the student's lived experiences, culture, and interests into word problems, instruction, and materials.
- **Background knowledge?** Think about how to highlight key ideas (e.g., similarities and differences) and define key vocabulary (e.g., compare, contrast) in a way that's engaging and not stigmatizing.
- **Showing what they know?** Think about having options for how they use learning tools (e.g., graphic organizers) and technology to communicate what they know and what they've learned.

For example, one possible barrier with this algebra standard may occur when information is presented in a way that prevents students from reading or understanding the information, like when a student does not grasp that a variable (such as *x*) represents an unknown value.

Ideas to reduce this barrier could include classroom educators:

- Continuing to act out word problems in a concrete way. For example, in a word problem where a person is shopping in a grocery store and they grab a bag of fruit with an unknown quantity, a teacher might demonstrate the word problem with an actual bag.
- Writing out the equation with a bag drawn in place of the variable or writing out the word *bag* in place of the variable letter.
- Use engaging word problems that include objects that are interesting to students.

Expanded Learning Progression for Secondary Math

	WA-AIM Access Points			Teacher adjusted	Grade Level Standard
	Less Complex	**Intermediate**	**More Complex**	**Further Complexity**	**Grade Level Standard**
Student Skill	Student will identify an algebraic equation involving addition and subtraction (up to 20) that represents a modeled real-world situation.	Student will solve a one- step algebraic equation involving addition and subtraction representing a real-world situation.	Student will write and solve a one-step algebraic equation representing a real-world situation.	Student will write and solve one-variable equations and inequalities involving addition and subtraction that model real-world situations.	HSE-CED-A.1 - Create equations and inequalities in one variable and use them to solve problems.
Complexity Details	• Matching with visuals • Addition and subtraction only	• Simple real-world scenarios • Solve for single operations/whole numbers	• Basic word problems • Write and solve single operations.	• Word problems requiring one-variable equations and inequalities • Write and solve single operations.	• Multiple operations and inequalities
Success Criteria Ex.	• Matches equations to situations • Recognizes equation structure	• Solves equations correctly • Shows systematic work • Explains solution step	• Translates words to equations • Solves independently • Verifies solutions	• Translates words to equations • Solves independently • Verifies solutions	• Solves one variable equations and inequalities independently • Verifies solutions
Instructional Strategy Examples	Visual Supports • Use large real-world manipulative • Picture cards for equations Scaffolds • Pre-made equation cards • Fill in the blank templates • Word banks Technology • Interactive equation builders	Visual Supports • Balance scale models • Step by step solution guides • Use algebra tiles Scaffolds • Equation solving mats • Guided practice worksheets • Think-aloud Technology • Virtual manipulatives • Self-checking apps	Visual Supports • Color coded word problems • Equation building templates Scaffolds • Keyword highlighting guides • Problem solving checklists • partner work • simplified text complexity Technology • Virtual manipulatives • Digital word problem creators	Visual Supports • Multi-step problem flowcharts • Strategic reference cards Scaffolds • Guided worksheets • Solution planning templates • Small group instruction Technology • Virtual manipulatives • Math modeling software	Visual Supports • Multi-step problem flowcharts • Strategic reference cards Scaffolds • Guided worksheets • Solution planning templates • Small group instruction Technology • Graphing calculators • Math modeling software

TEAM UNIT PLANNING EXERCISE

Elementary ELA Case Study

Increasing Student Access and Progress in Grade Level Standards by Adjusting Complexity

Found within the Reaching Every Learner Companion Tools document, the **Team Unit Planning Exercise Template** is designed to help educators apply the *Reaching Every Learner* approach in their planning and instruction. Grounded in the Universal Design for Learning (UDL) framework, it supports the creation of accessible, inclusive, and appropriately challenging units for all students.

Educators and teams can use these tools during co-planning, lesson design, and ongoing instructional adjustments to meet diverse learner needs.

This case study demonstrates how to use the **Team Unit Planning Exercise Template** to support students with significant cognitive disabilities in making progress in grade-level standards within a unit. It maps to the Expanded Learning Progression for Elementary ELA (found on page 9) and can be a helpful process when building out the **Expanded Learning Progression Template**.

Section 1: Whole Class

Unit Content Overview: Begin by writing a clear, short description of your unit's core content. This statement should capture the essential learning that will take place and provide a foundation for planning inclusive instruction for all learners**.**

Students will make connections between the text and video presentation of a story, identifying where each version reflects specific descriptions and directions in the text and how those variations impact how the reader or viewer understands the story.

Standards Alignment: Document the grade-level standards and corresponding WA-AIM Access Points that will be addressed in this unit. Include both content standards and any relevant supporting standards that will help guide instruction and measurement of student learning.

Grade Level and Supporting Standard(s):

RL.4.7 Make connections between the text of a story or drama and a visual or oral presentation of the text, identifying where each version reflects specific descriptions and directions in the text.

Are there WA-AIM Access Points for the Standard(s)? If Yes, detail them in Section 1 of the Team Planning Exercise:

- More complex: Student will compare and contrast two representations of a story.
- Intermediate: Student will identify differences between two representations of a story.
- Less Complex: Student will identify similarities between two representations of a story.

Learning Outcomes: Think about the unit's standards in terms of transferable understanding. What are the 2–4 fundamental skills that represent the learning all students should achieve through this unit.

For each learning outcome, develop 2–3 success criteria to demonstrate multiple ways a student could demonstrate their learning.

Prompt: Success criteria should be:

- *Observable and measurable*
- *Allow for multiple demonstration methods*
- *Support differentiated instruction*
- *Connect to real-world applications*
- *Enable student self-assessment to the extent appropriate*

Learning Outcome 1: Students can identify and analyze specific similarities and differences between written text and visual presentations by comparing scenes from "The Lightning Thief" book and film adaptation using appropriate evidence from both mediums.

- Identify specific elements (character descriptions, settings, or dialogue) from the book and how they appear in the film
- Show how story elements were adapted differently and an explanation of the significance of each difference

Learning Outcome 2: Students can evaluate how visual and oral interpretations of a text enhance or alter the original written descriptions by examining how characters, settings, and key events are portrayed differently across formats.

- Match descriptive phrases from the text to their visual counterparts
- Select a character, setting, or mythological element from the story and document how it's portrayed across different media (book, film, graphic novel, audio book, fan art, etc.)

Core Instructional Approaches: Describe the primary teaching strategies and learning activities planned for the whole class.

Prompt: Focus on methods that naturally incorporate the multiple means of engagement, representation, and expression from UDL to support all learners from the start.

Instruction will occur in various groupings and with various modalities, and include:

- Active and close reading of the focus text
- Collaborative discussion with peer partners
- Modeling and use of graphic organizers to compare and contrast different formats of a story

What instructional strategies and activities can be used to increase access and progress in the standard?

Students will access the concepts of comparing and contrasting different formats of a story through:

- Use of technology to access text (representation)
- Graphic organizers to display abstract concepts in a visual format (representation)
- Guided questioning and feedback (engagement)
- Single point rubric for self-assessment, teacher feedback, and goal-setting (engagement)
- Use of visuals, sentence stems, and word banks to participate in discussion and classroom assignments (action + expression)

Section 2: Planning for Students with Significant Cognitive Disabilities

Access, Engagement, and Action Analysis: What is <u>one barrier</u> to learning we anticipate for students with significant cognitive disabilities?

- Is it related to how student interest or engagement is addressed in the instruction?
- Is it related to how the student's background knowledge (e.g., vocabulary) is addressed in the learning environment?
- Is it related to options available for how students can show what they know?

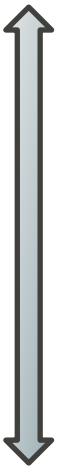
Some students may struggle with cognitive overload, given the need for them to compare and analyze complex and nuanced information from multiple sources.

Brainstorm one way to remove this barrier: What is one way you might remove the identified barrier in the learning environment?

Break down the learning outcomes into smaller, manageable tasks. For example, start with a focus on one character or scene before expanding to comparisons across multiple mediums. Provide clear instructions and examples, and offer scaffolding such as graphic organizers to help students organize their thoughts.

Complexity Adjustment Planning: Use this space to brainstorm how the content and tasks can be adjusted so that students can access the grade level standard(s) at different complexity levels. Once the list is built, then order it by complexity to create a continuum of complexity for how students can deepen their understanding in the unit.

Prompt: Consider how abstract concepts can be made more concrete and complex tasks broken into manageable components. Collaboration between general education and special education staff will enhance this exercise.



- Identifying similarities between two formats of a story
- Identifying differences between two formats of a story
- Sort similarities and differences of two formats of a story in a Venn diagram
- Identify changes in descriptions and directions between two versions of a story
    - Identify how the changes impact the reader
- List changes in descriptions and directions between two stories
    - Cite where those changes are in each text

Bank of Support Strategies: Outline a bank of instructional strategies that will assist students with significant cognitive disabilities to access and make meaningful progress in the learning activities. Consider visual supports, scaffolds and technology.

Visual supports

- Color-coded Venn diagram with raised lines
- Choice cards (examples/nonexamples)
- Graphic organizer with visual supports

Scaffolds

- Modeling identification of changes in description or direction
- Flexible grouping
- Structured responses
- Sentence stems
- Word banks
- Prompting and fading
- Peer supports
- Select passages from the text to use

Technology

- Hardcopy, audiobook, and e-book formats
- Read-aloud and speech-to-text features
- Use of tablet to drag and drop choices into graphic organizer
- Use of technology to adjust reading levels of text

Ongoing Planning for Individualized Support Strategies: Use this space as you are planning and refining instruction to document the individual support strategies students are needing. This box is intentionally shaded as educators may choose to leave this blank initially and instead update this over time.

Remember: For students who have an IEP, accommodations, modifications and support strategies that are determined to be needed may already be documented.

Progress Monitoring Approach Describe how you will measure learning for students with significant cognitive disabilities. Include multiple ways students can demonstrate understanding and how data will be gathered to inform instructional decisions.

Prompt: The progress monitoring approaches outlined should tie back to the learning outcomes and success criteria you identified in section 1.

Evidence of learning could be collected through:

- Multimodal assessments (student responds in multiple means, such as use of picture supports, graphic organizers, verbal/nonverbal communication)
- Modified assessments with reduced answer choices and/or structured response options
- Exit tickets with visual support options
- Student demonstrating the skill across multiple contexts/environments

TEAM UNIT PLANNING EXERCISE

Secondary Math Case Study

Increasing Student Access and Progress in Grade Level Standards by Adjusting Complexity

Found within the Reaching Every Learner Companion Tools document, the **Team Unit Planning Exercise Template** is designed to help educators apply the *Reaching Every Learner* approach in their planning and instruction. Grounded in the Universal Design for Learning (UDL) framework, it supports the creation of accessible, inclusive, and appropriately challenging units for all students.

Educators and teams can use these tools during co-planning, lesson design, and ongoing instructional adjustments to meet diverse learner needs.

This case study demonstrates how to use the **Team Unit Planning Exercise Template** to support students with significant cognitive disabilities in making progress in grade-level standards within a unit. It maps to the Expanded Learning Progression for Secondary Math (found on page 29) and can be a helpful process when building out the **Expanded Learning Progression Template**.

Section 1: Whole Class

Unit Content Overview: Begin by writing a clear, short description of your unit's core content. This statement should capture the essential learning that will take place and provide a foundation for planning inclusive instruction for all learners**.**

Students will develop skills in translating real-world situations into mathematical equations and inequalities, focusing on creating and solving one-variable expressions that model authentic scenarios while building conceptual understanding of algebraic relationships.

Standards Alignment: Document the grade-level standards and corresponding WA-AIM Access Points that will be addressed in this unit. Include both content standards and any relevant supporting standards that will help guide instruction and measurement of student learning.

Grade Level and Supporting Standard(s)

HSE-CED-A.1 - Create equations and inequalities in one variable and use them to solve problems.

Are there WA-AIM Access Points for the Standard(s)? If Yes, detail them in Section 1 of the Team Planning Exercise:

- More Complex: Student will write and solve a one-step algebraic equation representing a real-world situation.
- Intermediate: Student will solve a one- step algebraic equation involving addition and subtraction representing a real-world situation
- Less Complex: Student will identify an algebraic equation involving addition and subtraction (up to 20) that represents a modeled real-world situation.

Learning Outcomes: Think about the unit's standards in terms of transferable understanding. What are the 2–4 fundamental skills that represent the learning all students should achieve through this unit.

For each learning outcome, develop 2–3 success criteria to demonstrate multiple ways a student could demonstrate their learning.

Prompt: Success criteria should be:

- *Observable and measurable*
- *Allow for multiple demonstration methods*
- *Support differentiated instruction*
- *Connect to real-world applications*
- *Enable student self-assessment to the extent appropriate*

Learning Outcome 1: Students can identify and represent mathematical relationships from simple real-world situations using equations or inequalities.

- Identify important information in word problems by highlighting or listing the given values and what needs to be found
- Choose the correct variable and operation symbols to represent the relationship described in the problem
- Write a complete equation or inequality that matches the word problem

Learning Outcome 2: Students can solve one-variable equations and inequalities using structured supports and preferred problem-solving methods.

- Show each step of the solution process clearly, using available tools or supports
- Check work by plugging the answer back into the original equation or inequality
- Explain whether the answer is reasonable using words, numbers, or pictures

Core Instructional Approaches: Describe the primary teaching strategies and learning activities planned for the whole class.

Prompt: Focus on methods that naturally incorporate the multiple means of engagement, representation, and expression from UDL to support all learners from the start.

Instruction will blend concrete and abstract representations through:

- Starting with visual patterns and physical models before moving to symbolic notation
- Using manipulatives and graphic organizers to organize information
- Incorporating technology tools for visualization and calculation
- Implementing structured peer discussions about problem-solving strategies
- Creating opportunities for students to develop and share multiple solution methods

What instructional strategies and activities can be used to increase access and progress in the standard?

Students will access algebraic concepts through:

- Physical manipulatives representing variables (algebra tiles, balance scales)
- Color-coding for different parts of equations
- Step-by-step visual guides for equation solving
- Real-world scenarios connected to student interests and experiences
- Technology tools that provide immediate feedback and visual representations

Section 2: Planning for Students with Significant Cognitive Disabilities

Access, Engagement and Action Analysis: What is one barrier to learning we anticipate for students with significant cognitive disabilities?

- Is it related to how student interest or engagement is addressed in the instruction?
- Is it related to how the student's background knowledge (e.g., vocabulary) is addressed in the learning environment?
- Is it related to options available for how students can show what they know?

Some students may struggle with fluently decoding the symbols within the unit (+, - , <, >, ≤, ≥, =) this is connected to background knowledge. Other students may struggle to with the abstract representation of mathematical scenarios.

Brainstorm one way to remove this barrier: What is one way you might remove the identified barrier in the learning environment?

- A cheat sheet that decodes the common symbols within the unit that can be made available, customized and faded
- Beginning instruction with visual patterns and physical models before moving to symbolic. Tying instruction and problem solving to real world models

Complexity Adjustment Planning: Use this space to brainstorm how the content and tasks can be adjusted so that students can access the grade level standard(s) at different complexity levels. Once the list is built, then order it by complexity to create a continuum of complexity for how students can deepen their understanding in the unit.

Prompt: Consider how abstract concepts can be made more concrete and complex tasks broken into manageable components. Collaboration between general education and special education staff will enhance this exercise.

- Matching simple equations to real world situations
- Recognizing equation structure and symbols
- Begin by solving one step equations
    - Identifying concrete "missing value" problems using familiar contexts
    - Break equation creation into explicit steps with visual supports
    - Focus on addition and subtraction and single operations with whole numbers
    - Introduce division and multiplication
    - Introduce inequalities
- Write and solve one step equations from basic world problem
    - Focus addition and subtraction and single operations with whole numbers
    - Introduce division and multiplication
    - Introduce inequalities
    - Multiple operations and inequalities

Bank of Support Strategies: Outline a bank of instructional strategies that will assist students with significant cognitive disabilities to access and make meaningful progress in the learning activities. Consider visual supports, scaffolds and technology.

- Create equation-building templates with visual cues
- Use personalized reference sheets with common problem types
- Provide calculators, multiplication charts, or manipulatives for calculation support
- Use structured partner work with thoughtfully assigned roles and small group instruction
- Create step-by-step checklists or problem solving flow charts for problem-solving procedures
- Provide a range of visual supports (manipulatives, picture cards with equations, balance scales, algebra tiles)

Ongoing Planning for Individualized Support Strategies: Use this space as you are planning and refining instruction to document the individual support strategies students are needing. This box is intentionally shaded as educators may choose to leave this blank initially and instead update this over time.

Remember: For students who have an IEP, accommodations, modifications and support strategies that are determined to be needed may already be documented.

Progress Monitoring Approach Describe how you will measure learning for students with significant cognitive disabilities. Include multiple ways students can demonstrate understanding and how data will be gathered to inform instructional decisions.

Prompt: The progress monitoring approaches outlined should tie back to the learning outcomes and success criteria you identified in section 1.

Evidence of learning could be collected through:

- Video recordings of students explaining their thinking
- Digital portfolios showing progression from concrete to abstract representations
- Student demonstrations using manipulatives
- Modified assessments with reduced answer choices
- Performance tasks with real-world applications
- Exit tickets with visual support options
- Student demonstrating skill across multiple contexts/environments

RESOURCES

- OSPI Learning Standards & Instructional Materials webpage
- OSPI WA-AIM Access Point Frameworks and Performance Task webpage
- OSPI Comprehensive Inclusive Education webpage
- CAST has developed:
    - UDL Guidelines which support educators, curriculum developers, researchers, parents, and more to apply the UDL framework to practice. The guidelines offer a set of concrete suggestions that can be applied to any discipline or domain to ensure that all learners can access and participate in meaningful, challenging learning opportunities.
    - A Key Questions Guide to Consider When Planning Lessons that is a helpful guide for educators.
- The TIES Center has Universal Design for Learning Modules which were developed in collaboration with Washington schools to support educators and systems to collaborate to meet the needs of all students through rigorous learning goals and instruction that reflects high expectations.
- Dynamic Learning Maps System which provides professional development on learning progressions for educators working with students with significant cognitive disabilities.
- TIES 101: Communication Supports in the Inclusive Class

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