Mrs. Cali, a sixth grade science teacher, talks regularly with her colleagues Mr. James, a special education teacher, and Ms. Valerian, an ESOL teacher. This year, they support five English language learners (ELLs) in Mrs. Cali’s first period class, one of whom is also identified as having a specific learning disability (SLD). When the three teachers met one afternoon in October, they talked about how they might best ensure ELLs had access to the language found in content area instruction.

Mrs. Cali: I’m struggling to help my ELL students, especially Juliza, whose disability really seems to impact her learning. How can I accommodate both their language needs and Juliza’s disability while at the same time ensuring they all can meaningfully engage in our class activities?

Mr. James: Maybe we could break down the language in your units into more manageable parts? I have a lot of special education tools and activities that could help these students organize, process and remember the information they are given, too.

Mrs. Cali: So I should just use simpler language in my content area lessons?

Ms. Valerian: Simpler language is one strategy, but I wouldn’t suggest that we use that as our “go-to” strategy. Another approach you could use during content area instruction is a framework called the WIDA Key Uses of academic language. This approach will help you identify and explicitly teach commonly occurring patterns of language and help students think about how to make language choices about words and grammar based on the larger meaning—for example, the purpose of your inquiry or essential question. This way we could involve more of our ELL students in the grade-level conversations taking place in our classroom.

Mrs. Cali: That makes sense! I’d love to see what it looks like to use the Key Uses. Let’s get started!

The language development activities proposed in this Focus Bulletin draw from training examples used with the forthcoming WIDA tool called the Language Pathways. The Language Pathways identify the linguistic expectations unique to each WIDA Key Use of academic language and their salient language features to help teachers design instruction that supports language development for ELLs.
Overview

The purpose of this Focus Bulletin is to offer educators an approach for providing meaningful access to content area instruction to ELLs with disabilities. As shown below in Table 1, use of this approach involves three shifts for teaching: to focus instruction on (a) accessibility, (b) meaning-making at the discourse level, and (c) explicit teaching of the genres associated with schooling. These shifts can provide ELLs with greater opportunity to meaningfully engage in the curriculum.

Table 1. Shifts, definitions, and implications described in this bulletin

<table>
<thead>
<tr>
<th>From</th>
<th>To</th>
<th>Implications of this Shift</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Accommodations</td>
<td>Accessibility</td>
<td>By integrating support for specific student needs into the initial design of the lesson or activity (accessibility), rather than adding it on after instruction has been designed (accommodation), a broader range of student needs can be met</td>
</tr>
<tr>
<td>2. Begin with a focus on the subcomponents (the parts of language)</td>
<td>Begin with a focus at the discourse level on meaning and purpose</td>
<td>ELLs are meaning-makers, analysts, and users. This can be reinforced when activities are framed using discussions focused on authentic purposes</td>
</tr>
<tr>
<td>3. Simplified and/or modified language and curriculum</td>
<td>Explicit teaching of the genres associated with schooling</td>
<td>By embedding explicit instruction on the regularly occurring patterns of content area activity, practice, and language, the “hidden curriculum” of schooling is made visible and more accessible to students</td>
</tr>
</tbody>
</table>

Providing More Accessible Support for ELLs with Specific Learning Disabilities

In 2013–2014, the most prevalent category of disabilities for which ELLs were identified was specific learning disabilities. As defined in the Individuals with Disabilities Act of 2004, SLDs are a disorder in one or more of the basic psychological processes involved in understanding or using spoken or written language. This disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations and the severity of SLD varies by individual (Center for Parent Information and Resources, 2014).

Three of the most common (and often overlapping) challenges faced by students with SLD are in the area of auditory processing, dyslexia, and dysgraphia (defined in Table 2). While it is typical to define SLDs in terms of the difficulties students face with processing smaller language “parts” or features of academic language (at words/phrases and sentence level grammar), in this bulletin, we examine a pedagogy for explicitly situating and teaching academic language features in relation to larger discourse contexts and purposes for meaning.

Of concern, in 2013–2014 the nationwide identification of ELLs for SLDs (50%) was well above the rates for the general population of students identified as having specific learning disabilities (39%). In 33 states, the 2013–2014 identification rates for ELLs with SLD were far greater than the national average of 39%. The highest rates of identification occurred in Nevada (71%) and Utah (65%) (IDEA Data Center, 2015).
Table 1. Shifts, definitions, and implications described in this bulletin

<table>
<thead>
<tr>
<th>Common Type of SLD</th>
<th>From a Traditional SLD Definition Which Focuses on Language Parts</th>
<th>To an Expanded SLD Definition Which Focuses on Use of Language Parts in Context for Meaningful Purposes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Auditory processing disorder</td>
<td>A breakdown between the brain and spoken language. Students with this learning difference may have some degree of delay in reading and writing decoding as they build phonemic awareness.</td>
<td>A disconnect between hearing and the brain that may make it difficult for students to comprehend and participate in extended discourse like instructions, a story, descriptions, and so on. There is difficulty in receiving, remembering, understanding and using auditory information.</td>
</tr>
<tr>
<td>Dyslexia</td>
<td>A cluster of symptoms that result in difficulty with specific language skills, almost exclusively with text. There is a breakdown in matching speech sounds and how letters represent those sounds.</td>
<td>A processing disorder that can affect reading fluency, decoding, reading comprehension, recall, writing, spelling, and sometimes speech and can exist along with other related disorders. For these students, the words and letters on a page can be very difficult to process and understand.</td>
</tr>
<tr>
<td>Dysgraphia</td>
<td>Difficulty with writing. There is a breakdown in the ability to visualize letters and the motor planning to form letters.</td>
<td>An impairment in written expression impacting writing, spelling, and organization and coherence of thoughts. Students have difficulty translating their thoughts into writing.</td>
</tr>
</tbody>
</table>

Focusing more on the parts of language limits student access to more complex, grade-appropriate texts and activities. In this bulletin, we suggest that, rather than having the decontextualized, simplified parts of language as the primary focus of instruction (and focusing on what students can’t do in terms of basic literacy skills), it is important to also see ELLs—especially those with disabilities—as users of text, meaning-makers, and text analysts. Many aspects contribute to a student’s identity as a reader. ELLs, especially those with disabilities, need opportunities to understand and compose meaningful texts, use texts functionally, and analyze texts critically. While code-breaker or decoding skills are often easier to quantify in classroom, district, and summative assessments, ELLs—especially those with disabilities—need meaningful, rich opportunities to acquire grade-level language and thinking abilities.

**Shifting Instructional Design from Accommodation to Accessibility**

Sometimes educators view the accommodations as a magic bullet to address student needs. Yet use of accommodations only has a fundamental limitation: access to general education instruction and assessment. This occurs because accommodations, by definition, are added on after the instruction or assessment has been designed for the larger group; they don’t really change how instruction is delivered to the larger group of students.

Accessibility principles, including processes like Universal Design for Learning (CAST, 2008), can help educators rethink how they position language development support within activities. Accessibility, by definition, implies fundamental, proactive changes to curriculum, instruction, and assessment that can ensure that a wider range of students can be engaged in schooling from the outset (Shafer Willner & Monroe, 2016).

Students with disabilities who are also learning an additional language also need many opportunities to engage in meaningful learning experiences. As Martin and Rose remind us, “We develop language around a reason for using language . . . We need to help students engage with terms so they are offered opportunities to talk about things, not just ways to label objects” (Rose & Martin, 2012, p.5).
Providing Access to the Complex Language Found in Meaningful Learning Experiences

To help educators more easily identify meaningful, systematic language instruction necessary to participate in activities that target academic standards, WIDA has introduced the Key Uses of academic language, a genre-based approach to language development instruction. The WIDA Key Uses of academic language draw from the most salient expectations of the college- and career-ready standards: Recount, Explain, Argue and Discuss. By becoming aware of the different ways students need to use language during content area instruction, teachers can make more informed decisions as they plan language instruction for ELLs. Table 3 provides an overview and example of the WIDA Key Uses of academic language.

The WIDA Key Uses of academic language also reflect a deeper shift in how educators are thinking about instruction for language learners. The Key Uses of academic language make explicit organizational patterns and language features that are associated with the different purposes of text—the message. Messages always have a purpose, context, and audience. In addition, messages convey cultural norms and patterns of thinking so teaching these explicitly is another way of increasing access for students.

For more information on the Key Uses of academic language, check out WIDA Focus on Key Uses of Academic Language in the Classroom, available at https://www.wida.us/professionaldev/educatorresources/focus.aspx.

Table 3. Purposes associated with the WIDA Key Uses of academic language

<table>
<thead>
<tr>
<th>Key Use</th>
<th>How Language is Organized for Academic Purposes</th>
<th>Classroom Examples Associated with Key Use</th>
</tr>
</thead>
</table>
| Recount | Language is organized to display knowledge, to narrate or relate a series of events or experiences. Narratives follow a cultural story-telling pattern. Procedures require precise details with a clear sequence. Information reports are often restatements of facts, organized by headings and subheadings. | • Recount information through classroom-based questions  
• Retell or summarize narrative or expository text  
• Provide details of a procedure  
• Write information reports |
| Argue   | Language is organized around a claim supported by evidence. The development of an argument is determined by the audience and purpose. Order for a logical argument and word choice for a persuasive argument are very important in advancing the claim. | • Provide logical and persuasive arguments  
• Incorporate and address counter arguments.  
• Anticipate future outcomes as a result of the claim and evidence |
| Explain | Language is organized to clarify order or relationships between ideas, actions, or phenomena, specifically by giving an account of how something works or why something is happening. The aim of an explanation is to help readers/listeners comprehend a phenomenon. | • Cycles (life cycle, water cycle)  
• Systems (government, computers, ecosystems)  
• Phenomena (volcanic eruptions, migration, pollution, extreme weather formation) |
| Discuss | A discussion is used to engage in an exploration of a topic and/or various other points of view and implications, often for the purpose of co-constructing knowledge. Discussions also provide opportunities to look critically at language choices and how they influence meaning. | • Shared social conventions and participation in discussions (questioning, contradicting/disagreeing, elaborating, turn-taking)  
• Examining hidden norms, bias, and power relationships by discussing language choices in texts. |
Case Study: Improving Student Explanations During a Science Unit

Mrs. Cali’s sixth grade class is doing a science unit on ecosystems during which they explore how the nitrogen cycle works. This unit is centered around the Next Generation Science Standard (NGSS), MS-LS2-3: Develop a model to describe the cycling of matter and flow of energy among living and nonliving parts of an ecosystem. Mrs. Cali describes how the unit is planned around the particular set of core ideas, cross-cutting concepts, and practices associated with the performance expectations for this standard (NGSS, 2013).

Mrs. Cali has decided to situate the unit in an authentic problem so that the students can use language for a meaningful purpose. Mrs. Cali poses a problem to the students: “How might we create a healthy ecosystem for our new class pet, a betta fish?” A new fish? The class is excited!

In this unit the class will design an ecosystem for their new fish, and then model and explain how the different components of the fish tank ecosystem contribute to the nitrogen cycle. In the final part of the unit, the students will apply their knowledge about ecosystems and the nitrogen cycle to analyze different types of betta fish tanks and persuade potential pet owners to create the healthiest environment possible for their fish.

Mr. James nods, “Okay, but I have a couple of thought questions. I just came back from a district training on science. I get it that we’re trying to focus on more than just science facts and to help kids think and communicate about the world—but how do we specifically identify the language skills needed? Can we tie it to the four practices associated with this standard: (1) developing and using models, (2) analyzing and interpreting data, (3) constructing explanations and designing solutions, and (4) engaging in arguments from evidence?”

To zero in on the language needed by students to participate in deeper practices, Mrs. Cali, Ms. Valerian, and Mr. James can use a genre approach throughout a unit. This approach allows them to identify where to insert lessons that focus on the types of language use to be developed within a particular context and for a particular purpose. In this unit, the students use language for the following purposes:

- As they select and construct the fish tank ecosystem, the students need to recount information they researched about the ecosystem that their class betta fish will inhabit. Important components of their descriptions include the biotic components (e.g., plants, fish, and bacteria) and abiotic components (e.g., water, sun, soil, and air). Students need to develop, use, and revise models to describe, test, and predict more abstract phenomena and design systems.

- As they monitor the quality of the fish tank and keep their fish healthy, the students need to explain how the nitrogen cycle works (using multiple sources of evidence consistent with scientific knowledge, principles, and theories). Students also need to explain the difference between factors involving correlation and causation.

- As they think beyond their classroom to focus on how the nitrogen cycle impacts the quality of life on Planet Earth, students need to be able to construct arguments to support their actions and refute claims for explanations or solutions about the natural and designed world(s).

The following sections of this bulletin provide examples of how lessons around the WIDA Key Uses of academic language might be woven into the unit activities. The examples we share are organized using the genre teaching and learning cycle during which students are provided opportunities to (a) jointly deconstruct, (b) jointly construct, and (c) independently construct texts (Rothery, 1994). Throughout the genre teaching and learning cycle, Mrs. Cali makes sure to provide students with opportunities to build the field, that is, to ensure students are given explicit opportunities to learn the specific discourses of science and to learn specific language genres (that is, Key Uses of academic language) that cut across different subject areas.
Building Student Awareness of Common Patterns within Content Area Language

Not only do students need to build background knowledge about content area concepts, students also need opportunities to build schema around the regularly occurring patterns of language being used. As the class progresses through their science unit, Ms. Valerian suggests to Mrs. Cali that they focus on a common misconception associated with language that is used to create explanations. Unlike informational recounts, explanations require information to be conveyed in a very specific order. She shows Mrs. Cali, “With informational recounts (pointing to the reports students recently submitted), a writer can take all kinds of information and put it in pretty much any order and it will still make sense—but you can’t do that with an explanation. An explanation has to go in a particular order to make meaning.”

Sample Lesson to Reveal How Language Patterns Differ in Recounts and Explanations

Mrs. Cali begins the class lesson by dividing the students into groups of six. Each student is given a sentence that describes one part of the fish tank ecosystem, using the language they generated earlier when they were researching and describing the components of the fish tank. Mrs. Cali asks each group to get in a line and read their sentences, creating a paragraph. “Do you see how each person has a piece of a paragraph?” Then, she asks them to mix up their order in the line and to read their paragraph again. “Does it still make sense?” Mrs. Cali points out to the students, “The way you lined up the sentences is how you might do this when you write an informational report. There are many ways you could order the information you’re recounting and it could still make sense.”

When observing student language development, look at it in terms of the larger discourse in which they are participating:

- Can the student use the appropriate organizational structure for the type of text?
- How does the student put together the building blocks of discourse (both at the sentence and word levels)?
- Are there ways to provide the student who has an auditory processing disorder alternate pathways for recounting events or information?

The same groups of students are given a different set of sentences about the nitrogen cycle (using the language found in the diagram from Aquaponics Resource [2015]). The students are asked to place these sentences in order. They quickly realize that, if they change the order of the seven sentences or leave out a sentence, the nitrogen cycle within their fish tank could fall out of balance and put the health of their fish in danger:

1. Fish produce ammonia through their waste and gills. Ammonia is toxic to fish.
2. Naturally occurring bacteria will sense the build-up of ammonia, be attracted to it, and begin to colonize.
3. As the bacteria begin to eat the ammonia, it changes into nitrite.
4. Another naturally occurring bacteria notices the nitrite and is attracted to the it. The bacteria make colonies, and then nitrite is now converted into nitrate.
5. Plants love nitrates. Plant will absorb nitrates depending on where they are in their growth cycle.
6. Once the plants absorb the nitrates, the water will be clear.
7. The clear, filtered water is pumped back into the fish, where the whole process starts over again.

Ms. Valerian asks the students, “Why do you think is it important to correctly order the steps in an explanation? Juan responds, “We want to take care of our fish and if the person who is taking care of the fish is out of school that day, someone else can do it.”

Thus, as students explore the patterns in language needed to participate effectively in science class, the teachers can find opportunities to explicitly teach ELLs any new language features they may encounter, highlighting cognates, similarities, and differences with students’ home languages. They can also explicitly highlight shared structures in both languages, because it is always important to weave language acquisition support into activities.
Meaning-Oriented Deconstruction: Providing Access to More Complex Language

The sentences of the nitrogen cycle might seem daunting to ELLs with either beginning and intermediate proficiency and lead teachers to simplify it so it’s just above students’ proficiency level. However, rather than limiting ELL access to classroom content by providing more simplified language, it is important provide access to sentences that Lilly Wong-Fillmore terms “juicy sentences” (Wong-Fillmore & Fillmore, 2014). Why? “The language used in complex texts differs enough from the English familiar to most students that it constitutes a barrier to understanding when they first encounter it in the texts they read in school” (p. 1). Don’t shy away from complex sentences; set aside time to explore the “juicy sentences” found in content area texts.

To help ELLs explore and learn the needed vocabulary and grammar, Ms. Valerian focuses her lesson on why it is important to use particular types of descriptive noun phrases and verb phrases: “In this unit, you’re going to be creating a model of the ecosystem. You’ll need to explain how the different parts of the system fit together. One thing that’s important is that when you write an explanation you need really good descriptions.”

“Now let’s look at the nitrogen cycle, let’s look to see if there are any places that might need added detail. They examine the seven-sentence explanation of the nitrogen cycle. Ms. Valerian writes down one of the sentences from the nitrogen cycle chart:

“Naturally occurring bacteria will sense the build-up of ammonia, be attracted to it, and begin to colonize.”

Ms. Valerian tells students they are looking at noun phrases which can add a lot of information about the noun and help convey important details within their explanation. As shown in Table 4, she asks the following series of questions to help deconstruct the text and focus on what language is doing in the sentence. Her questions are designed to keep the focus on the language and the author’s choices. (The author is making these choices for a reason—and these choices support the meaning of the sentence.)

<table>
<thead>
<tr>
<th>Question prompt</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is this sentence about?</td>
<td>Bacteria</td>
</tr>
<tr>
<td>What is the focus of this step of the cycle?</td>
<td>They are microscopic single-celled organisms that can live in soil, in water, or even inside humans (in the mouth or stomach, for example).</td>
</tr>
<tr>
<td></td>
<td>Yes, but the text tells us that this is special bacteria. . . .</td>
</tr>
<tr>
<td>What kind of bacteria? Why do you think the author keeps telling us this is naturally occurring bacteria? How would the meaning be different if it just said bacteria?</td>
<td>Naturally occurring bacteria</td>
</tr>
<tr>
<td></td>
<td>Yes. So we know they are part of the cycle. They are here all the time. These naturally occurring bacteria do something special that can sense a change in their ecosystem. These bacteria show up anywhere it is wet and change what is happening. We will not need to add the bacteria to our fish tank.</td>
</tr>
<tr>
<td>Ms. Valerian did NOT ask students to define new vocabulary as they analyzed the sentence because this type of question led to a conversation where the students were basically guessing the possible definitions. The students then would have to “unhear” the incorrect definition. Instead, she TOLD them the meaning as it relates to the text.</td>
<td>Here we see that our naturally occurring bacteria sense ammonia and are attracted to it.</td>
</tr>
<tr>
<td></td>
<td>Attracted means they move towards it, they want to be near it for a very special reason we learned before. The bacteria eat the ammonia as part of cycle of keeping the water clean.</td>
</tr>
</tbody>
</table>
It might also be important to mention here that while the words naturally occurring are serving as descriptors to bacteria, these words aren’t what we usually consider adjectives (like those that typically tell us about shape, size, color, and so on). Sometimes there are things that don’t look like adjectives but which act like adjectives. Students can create a list.

- Ammonia-eating bacteria
- Nitrate-balancing bacteria
- Single-celled bacteria
- Ammonia-loving bacteria
- Ammonia-colonizing bacteria
- Beta-saving bacteria
- Nitrite-converting bacteria

Pauline Gibbons often recommends you ask multimodal questions about texts (Gibbons, 2015).

> So here we have little microscopic bacteria eating up ammonia in the fish tank. Can you draw an example of what this might look like through the microscope?

Ms. Valerian continues by asking students more about the sentence and the events it describes. How do the descriptions help them visualize these events? What might you think about, see, and smell when you read this description? They talk about how these types of prompt questions can help when students are writing descriptions in their own writing.

They do a practice activity using prompt questions to build descriptive noun phrases. Ms. Valerian breaks students into new small groups to practice writing noun phrases and gives each group a packet that contains several pictures from the nitrogen cycle, cue cards with wh-questions, and adjective cards. Some adjective cards are ready-made to jump start students, but there are blank cards as well. These manipulatives are particularly important for students with SLD, keeping one word per card to make processing easier. Group work provides learning supports and opportunities for language practice. Finally, Ms. Valerian asks students to write a sensory description on their own. She reminds them to choose language that will help the readers use their senses.

Joint deconstruction activities are important to orient students to the larger discourse patterns of the genre. As students are writing their own explanations about the nitrate cycle, they are now in a stronger position to follow the conventions of science systems explanations. When lessons move to the final part of the unit—moving beyond the betta tank to create an argument to support their actions and refute claims for explanations or solutions about the natural and designed world(s)—it will be necessary to build the field around logical arguments by jointly deconstructing and constructing examples of this genre before students engage in independent writing.

### Joint Construction: “Go Slower to Go Faster”

A challenge faced by every teacher is the lack of instructional time. To compensate, teachers often model a particular skills or strategy, but then move too quickly into independent practice, which impacts students who are learning the target language used in the classroom and/or who have a language-related disability. Sometimes to go faster, teachers need to go slower. Including the step of jointly constructing text together before moving on to independent writing helps students to think, with group support, about how language is operating.

For the final part of the unit, the students apply their knowledge about ecosystems and the nitrogen cycle to analyze different types of betta fish tanks and persuade potential pet owners to create the healthiest environment possible for their fish. For homework (which might be completed at school during their end-of-day enrichment period), the students are asked to read the Web page, “The Infamous Betta Vase” (Seyffarth, 2013).

In the next class, Mrs. Cali can now have a deep conversation with students about language choices and how students can further their purpose for writing. This time is well worth the investment, since students who are struggling or still learning English are often asked to write independently too soon. In fact, work that is completed without teacher guidance (i.e., independent work) does not always have to be done alone. Consider this: “If it is hard to recall critical information from the sentences one has just read, as is often
When providing feedback to students, consider how you can connect to and build on student assets. Rather than intervening with the answer, pause for a moment. **Identify and describe to the learner the parts of the task the learner can do.** Help the learner use think-aloud strategies to isolate any misconceptions or challenges he or she might have encountered.

- How might we monitor and check spelling using classroom resources?

Together, the teacher and student(s) can construct a similar text to the one they will later write. Here, the teacher has the option of focusing on all aspects of writing. This provides opportunities for the students and teacher to discuss the overall structure of the text, suggest more appropriate vocabulary, consider alternative wording, and work on mechanics (spelling, punctuation, and grammar).

As the students begin to work together jointly, their conversations are more social in nature, with a great deal of emotion and passion as they share their thoughts and feelings with classmates. As the process progresses and the teacher focuses discussion on how well the authors of different readings state claims and connect evidence to those claims, the language choices in the small group of students change from one of personal response to critical analysis and pointing out language features that connect the evidence. At the unit end, students write a persuasive argument for an authentic purpose, and once again make language choices to reflect the task, tailored to the audience. These types of learning opportunities provide context for the wide range of language that students need to develop within content area instruction.

### Final Reflections

As we move forward into the era of co-teaching, a fundamental recalibration in approach is taking place, with educators shifting from a focus on accommodated (on-the-side) support to support that is integrated and accessible to a broader range of students. When teachers focus on accessibility, fundamental changes are made to curriculum, instruction, and assessment to ensure that a wider range of students are engaged fully in schooling from the start (Meyer & Rose, 2005).

When content area lessons, text readings, conversations, and learning and writing activities include instruction that improves students’ language awareness, we also provide them with greater access to the language of schooling. By collaborating around the strengths, knowledge and experience they each bring as educators in different fields, these teachers were able to improved language access to a broader range of students, but most especially, to offer improve language access opportunities for an ELL with a specific learning disability.

By integrating language development instruction into content area instruction and by using a genre approach to identify patterns of language on which to focus and then scaffolding participation, more students can have access to the curriculum, rather than providing instruction that privileges only those students who already are able to independently complete classroom activities.
In 2015–2016, WIDA updated its accommodations framework to include accessibility principles and strategies and informs the design of this Focus Bulletin. The language development activities proposed in this Focus Bulletin draw from training examples used with the forthcoming WIDA tool called the Language Pathways (Lundgren, forthcoming).

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