FROM THE COLLEGE AND CAREER READY STANDARDS TO TEACHING AND LEARNING IN THE CLASSROOM: A SERIES OF RESOURCES FOR TEACHERS

HIGH-LEVERAGE PRINCIPLES OF EFFECTIVE INSTRUCTION FOR ENGLISH LEARNERS

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ORGANIZATION

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This resource is part of a series produced by the Center for Standards and Assessment Implementation (CSAI) to assist teachers and those who support teachers to plan teaching and learning from College and Career Ready Standards (CCRS) for all students, including students with disabilities, English learners, academically at-risk students, students living in extreme poverty, and gifted/talented students. The series of resources addresses key shifts in learning and teaching represented in the CCRS. The processes described and illustrated in this resource are applicable to all States' CCRS, including the CCSS.

INTRODUCTION

About one in ten K-12 students in the U.S. are English learners (ELs). They are the fastest growing student population in U.S. public schools. As the EL student population continues to increase—their growth in some states is more than 40 percent—educators across the country need to address and meet the demands of our nation's rapidly growing EL population.[1] To succeed in this challenge, teachers need appropriate tools and knowledge to support EL students' achievement.

EL students' unique needs are recognized by the reauthorization of the Elementary and Secondary Education Act with the Every Student Succeeds Act (ESSA).[2] Key ESSA provisions pertaining to EL students are summarized in the following table.

Title I	**Standards** • States must have English language proficiency (ELP) standards in the domains of listening, speaking, reading, and writing. • ELP standards must align with academic content standards. **Assessment** • States must provide an annual assessment for ELP (aligned to ELP standards). **Accountability** • States must include an English proficiency indicator in their accountability systems. • States will set their own goals for ELP rates and targets. **Support and Improvement** • States will ensure that local educational agencies implement evidence-based practices to support low-performing schools.
Title II	States need to describe how it will improve the skills of teachers, principals, or other school leaders in order to enable them to identify students with specific learning needs, including EL students.
Title III	• States must have standardized, statewide entrance and exit procedures. • States will provide effective teacher and principal preparation, effective professional development activities, and other effective activities related to the education EL students (e.g., implementing effective programs and curricula).

[1] Office of English Language Acquisition. (2017). *Profiles of English learners (ELs)*. Retrieved from http://www.ncela.us/files/fast_facts/05-19-2017/ProfilesOfELs_FastFacts.pdf

[2] Information about ESSA were obtained from the following sources:
Council of Chief State School Officers. (2016). *Major provisions of Every Student Succeeds Act (ESSA) related to the education of English learners*. Retrieved from http://www.ccsso.org/Documents/2016/ESSA/CCSSO%20Resource%20on%20ELs%20and%20ESSA.pdf
Every Student Succeeds Act of 2015, Pub. L. No. 114-95 § 114 Stat. 1177 (2015-2016).

This resource presents evidence-based instructional strategies to help EL students become proficient in English and achieve challenging state academic standards. It recognizes that EL students are a highly diverse group of students hailing from various cultural, linguistic, and educational backgrounds. What binds these diverse students together is that, as learners of English in U.S. classrooms, they must acquire both English proficiency and disciplinary knowledge at the same time, doing "double the work" of their monolingual peers.[3] Engaging in this work thus requires teachers of EL students to understand effective ways to assess and teach both language and disciplinary content.

The resource summarizes high-leverage learning and teaching principles that can be incorporated into daily instructional lesson plans and routines. These five principles represent a synthesis of literature on best instructional strategies for EL students:

1. Determine and address the academic language demands of the lesson;
2. Build upon students' background knowledge;
3. Design and scaffold deeper learning tasks that integrate listening, speaking, reading, and writing domains;
4. Provide opportunities for student participation through extended oral discourse and structured collaboration; and
5. Use formative assessment to support both language development and content goals.

This resource begins with an overview of college and career ready standards and the instructional shifts they require of teachers to help EL students achieve the new standards. Next we foreground formative assessment, an evidence-based instructional process that integrates assessment and instruction to promote student learning, which provides a framework for incorporating the principles. Then we present the high-leverage principles, including guiding questions and examples of how to apply the principles in instruction. To illustrate how these principles are enacted in a lesson, we provide an annotated vignette. The literature used to develop these high-leverage EL principles are listed at the end of the resource.

[3] See Short and Fitzsimmons (2007).

NEW STANDARDS AND INSTRUCTIONAL SHIFTS

State college and career ready standards (CCRS) establish more rigorous expectations for all students' learning than what was expected in the past. Commonly, these standards, such as the Common Core State Standards (CCSS) in English language arts and mathematics and the Next Generation Science Standards, incorporate students' use of language to understand, articulate, and convey understanding of the content.

For example, a Grade 8 standard for reading informational text calls for students to "cite the textual evidence that most strongly supports an analysis of what the text says explicitly as well as inferences drawn from the text."[4] For EL students, especially younger students or those at the early levels of English language proficiency, the language demands of this standard can be daunting: first, EL students need to know enough grade level vocabulary, sentence, and discourse structures to comprehend the text; then they need to apply academic skills to infer meaning of what they read using their background knowledge and evidence they found directly from the text; lastly, they need to present their conclusions of the text either orally or in written form, both domains which require their own standards of use for sentence and discourse structures.

These new standards require important shifts in instruction related to language learning, as summarized in the figure below. Adapted from Stanford's Understanding Language initiative, the figure draws from a close analysis of college and career ready standards and research on learning, particularly language learning. The major messages from their research are that language instruction needs to be embedded in content instruction, reflect disciplinary practices, and must meet students where they are relative to their content knowledge and language development. This intersection of content and language are not new; it has long been researched and programs have been designed to account for this integration, but the new standards have made addressing content and language during instruction much more

[4] New York State P-12 Common Core Learning Standards for English Language Arts & Literacy, Reading Standards for Informational Text, 6-12, Grade 8 students: 1, retrieved from https://www.engageny.org/file/736/download/nysp12cclsela.pdf.

prominent for all teachers.[5] Additionally, as the figure points out, new standards reflect decades of research that shows that learning is a social process in which working, conferencing, and engaging in extended oral discourse with peers and teachers are critical in achieving learning.[6]

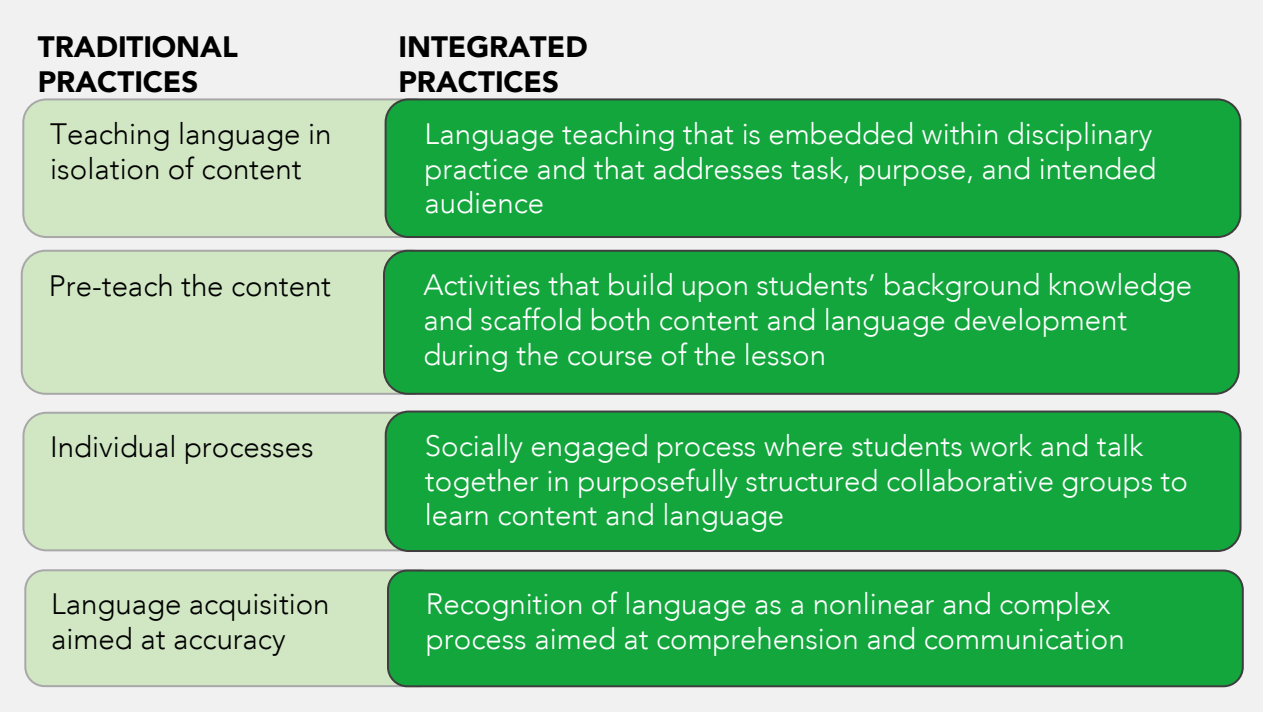


Figure. Shifts in instructional practices as they relate to language learning in the content areas. Adapted from Walqui (2012) and Haynes (2012).

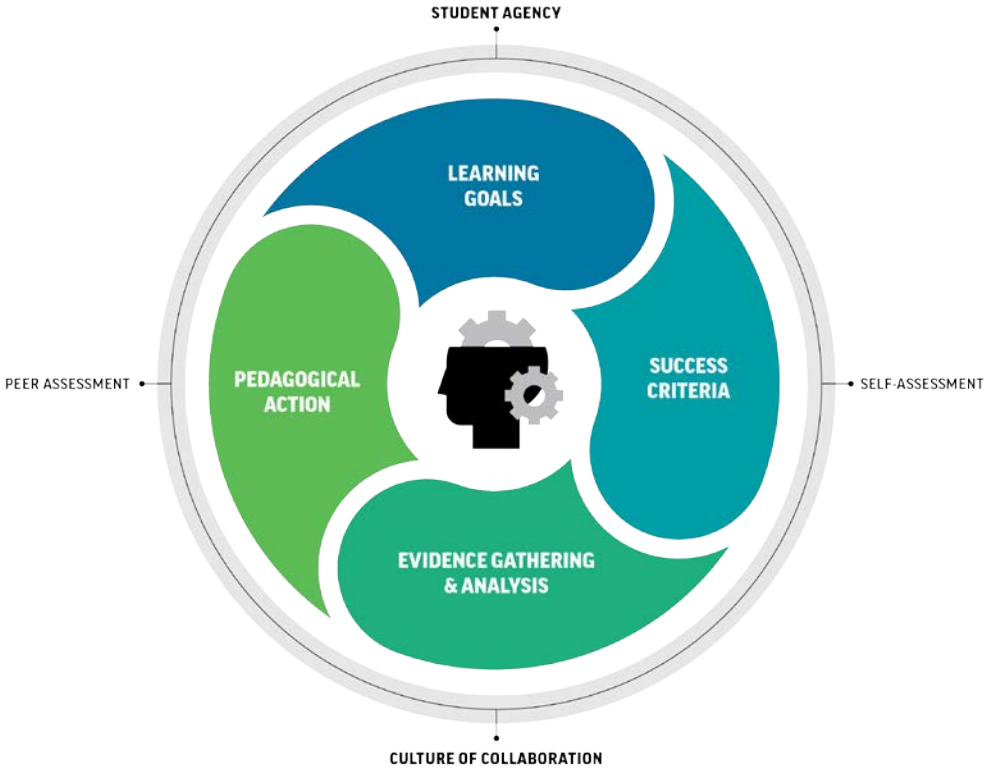
[5] Bailey, A. (2013, April). *Implications of the Common Core for English language development/proficiency standards: A role for learning progressions of language development.* Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.
Mohan, B. M. (1986). *Language and content.* Reading, MA: Addison-Wesley.
Snow, A., Met, M., & Genesee, F. (1989). *A conceptual framework for the integration of language and content in second/foreign language instruction. 23*(2), 201-217.

[6] See Gee (2007).

THE FORMATIVE ASSESSMENT PROCESS

As with all the resources in CSAI's Curriculum and Instruction series, formative assessment is used to ground teaching and deeper learning of the standards.[7] Formative assessment, an evidence-based approach that has been shown to increase student learning,[8] is the "process used by teachers and students during instruction that provides feedback to adjust ongoing teaching and learning to improve students' achievement of intended instructional outcomes."[9]

The figure below illustrates how formative assessment is an iterative process. Grounded in specific lesson learning goals and success criteria, teachers and students are continuously collecting and analyzing evidence of their learning progress over the course of the lesson and taking immediate action to bridge any gaps to facilitate students' learning success. Through peer and self-assessment, core components enacted within formative assessment, students engage in a culture of collaboration and student agency.



[7] For additional resources on formative assessment and lesson planning, visit CSAI's Curriculum and Instruction collection at csai-online.org/collections/1505.
[8] Black & Wiliam (1998); National Research Council (2012).
[9] Formative Assessment for Students and Teachers, State Collaborative on Assessment and Student Standards of the Council of Chief State School Officers (2008).

Formative assessment is an especially important and helpful pedagogy in instructing EL learners to meet the new demands—especially in language—set forth in CCRS. As argued by Alverez and colleagues,

> Formative assessment may be even more critical for the effective instruction of ELL students than non-ELL students. ELL students are learning content, academic skills, and language simultaneously, and hence are more likely than non-ELL students to develop misconceptions in the course of learning academic practices taught in English—misconceptions that need early detection so that the course of learning can be reset.[10]

More on the formative assessment process is found on pages 33-42 of this resource.

[10] Alverez, Ananda, Walqui, Sato, & Rabinowitz (2014), p. 13.

HIGH-LEVERAGE PRINCIPLES FOR TEACHING AND LEARNING WITH ENGLISH LEARNERS

Research has found that what is good for EL learners is good for all students, but what is adequate for a general population of students may not meet the needs of EL learners. The five high-leverage principles described below thus are relevant for all students but are particularly important for EL instruction. These principles are "high leverage" because they synthesize the work of leading scholars and educators and reflect basic practices that can improve teaching and learning for EL students across the content areas.

Below, we describe each principle with definitions and examples, then offer guiding questions to help teachers reflect how they can implement each principle in their instructional routines, plans, and practices. Teaching tips and examples are also provided to help teachers implement the principles.

Principle 1: Determine and address the academic language demands of the lesson

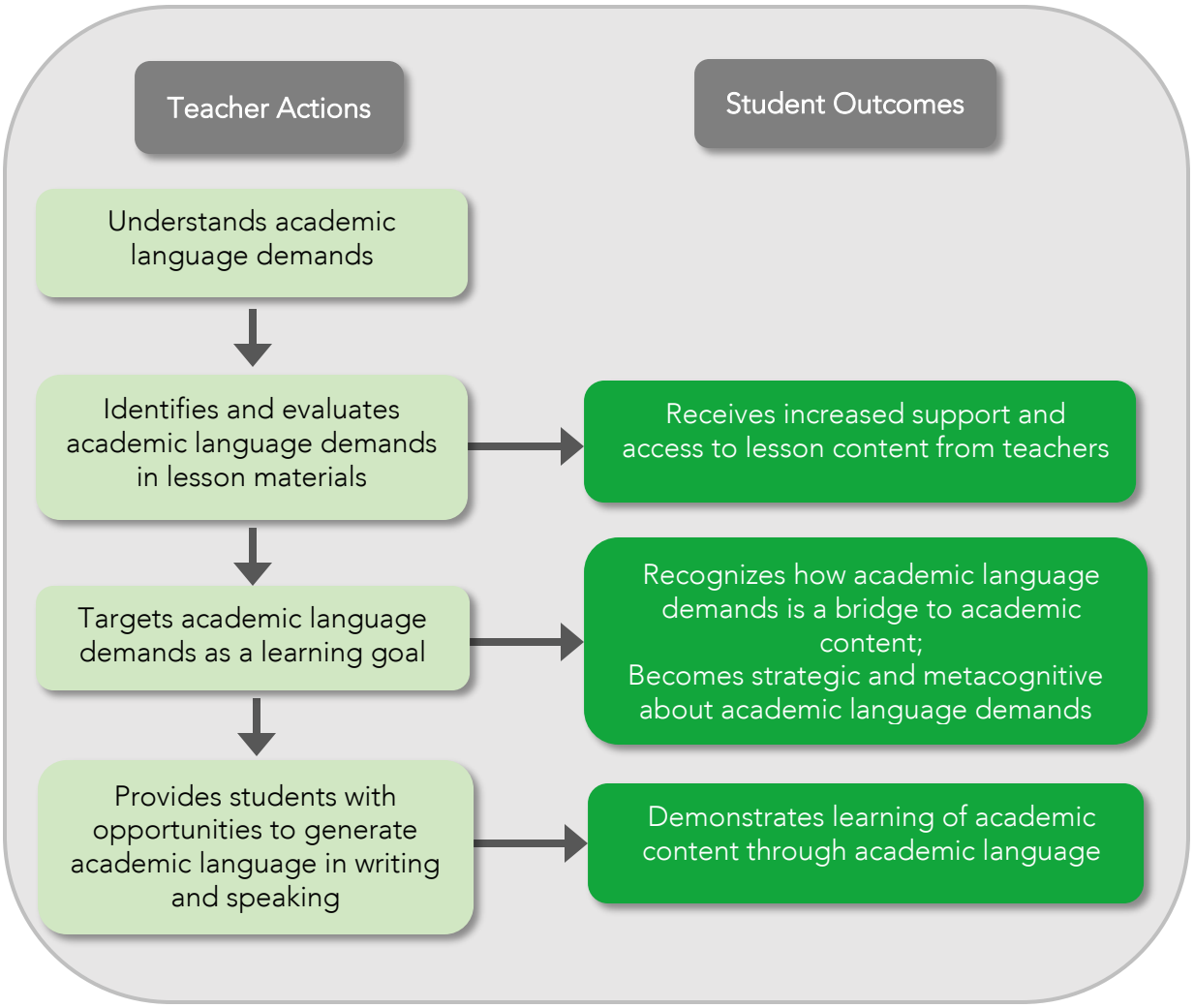
Academic language is just that – the language used in academic or school settings. Much has been written in the last two decades on the difference between academic language and social language and the need for all students, especially EL students, to use academic language to attain school achievement.[11] To help their students do so, teachers need to understand the academic language demands that their instruction involves.

Academic language demands are the ways in which students must use language (i.e., reading, writing, listening, and speaking) to participate successfully in disciplinary learning tasks and to demonstrate their learning. The word "demands" refers not to difficulty but to what language is required by class work, or more specifically, what language the student needs to use to accomplish classroom activities and tasks. In this section, we deal with two major categories of academic language demands: language functions, or how students use language to serve various communicative purposes (e.g., explaining, justifying, inferring, seeking information, informing) and language features at the word, sentence, and discourse levels.

[11] See, for example, Anstrom et al. (2010); Bailey (2007), Christie (1985), Cummins (1981), Schleppegrell (2004, 2005), and Snow & Uccelli (2009). Full references are found on pp. 49-50.

In planning and implementing lessons, teachers should consider how these academic language demands influence students' disciplinary learning. For example, in a lesson about photosynthesis, students will encounter how scientists use particular words (e.g., "process," "produce," "perform," "oxygen," or "carbon dioxide"), sentence types (e.g., complex sentences with relative clauses, such as "Carbon dioxide and oxygen are both invisible gases that are part of the Earth's atmosphere, and both are essential for nearly all living things"), and discourse structures (e.g., linking of concepts and ideas between paragraphs, subheadings, labeled illustrations, chemical equations) to convey what photosynthesis is and what it does. Furthermore, students may read text that informs them about the process of photosynthesis, and may be required to later explain the process or its importance. Understanding photosynthesis requires that teachers and EL students attend to these academic language demands found in the lesson. While this may be true for all students, EL students may need explicit instruction and additional support in understanding academic language demands.

Helping students identify and understand academic language demands benefits both students' language development and their conceptual learning. The ultimate goal is that EL students can fluently use the functions, features, and demands of academic language in learning academic content. However, depending on the teacher's purpose and familiarity with academic language, there is a continuum of support that teachers can use to both identify and help students navigate language demands (see figure below). At times, determining the language demands may help teachers accommodate and modify lessons to meet the needs of their EL students. Other times, teachers may provide explicit instruction to build student capacity to deal with the particular function or feature.



The information on following pages is intended to help teachers identify both the academic language functions and the language features that may present obstacles to EL students' content and language learning.

Academic Language Functions

Academic language functions involve how students use language, or the tasks that language users must be able to perform in an academic setting. Although different disciplines may favor certain language functions over others (e.g., valuing specific reasoning processes, such as inductive vs. deductive; privileging traditions of argument, such as Socratic Method), many academic language functions are used across the disciplines. The list below provides some examples of academic language functions that cut across most disciplines:

- Describing content
- Citing and using evidence
- Evaluating knowledge

- Analyzing or synthesizing information
- Constructing arguments
- Making meaning
- Inquiring and raising questions
- Explaining procedures or processes
- Justifying opinions

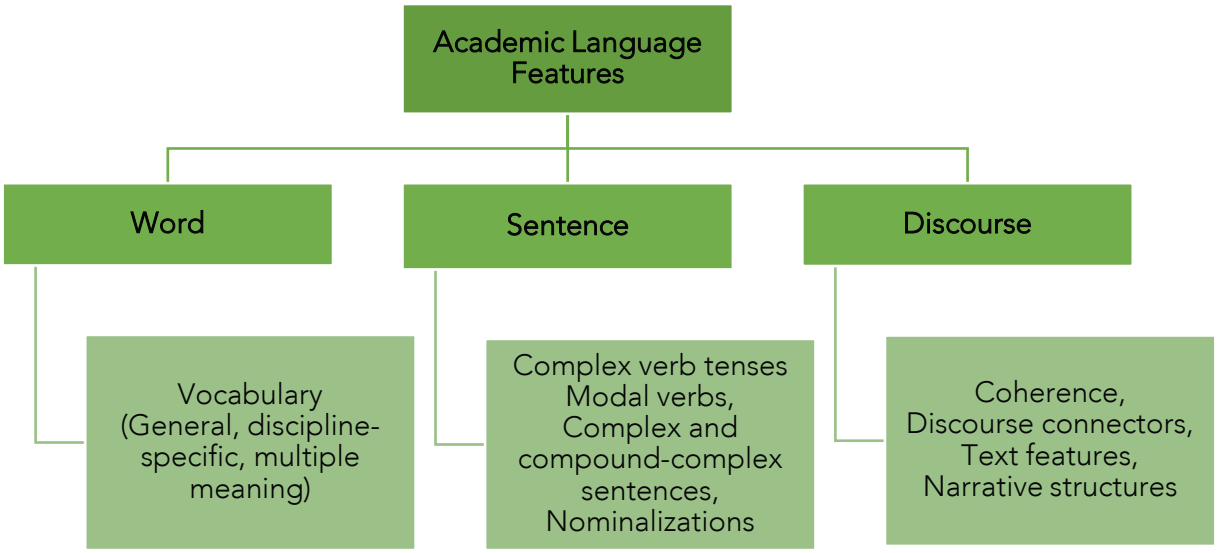
By recognizing what language functions a lesson calls on, teachers can consider how familiar their EL students are with the function and what language features and other supports students may need to enact the function.

Academic Language Features

Using language functions involves coordinating various academic language features. These consist of word, sentence, and discourse structures that comprise language:

- *Word* – Meaning and use of vocabulary words and phrases
- *Sentence* – Organization of sentences by grammar (the system of rules by which words are put together to make sentences, e.g., verb tense and agreement) and syntax (the arrangement of words and phrases to create well-formed sentences in a language; e.g., from ordering of words to tone and style)
- *Discourse* – Organization of structures in written and oral text longer than one sentence

The chart below shows the key sub-features for the word, sentence, and discourse features defined above.



The table on the following pages gives more detail on key sub-features for the word, sentence, and discourse features and provides examples of each. It also describes ways that these sub-features may impede on learning for EL students.[12] Note that some characteristics may seem more difficult than others depending on teachers and students' familiarity of these language features. Teachers can use their knowledge of students' language capabilities and their lesson goals to determine which may be most important to help students deal with.

	Key Sub-Features and Definitions	Guidance and Examples
Word	The following categories of words are used predominantly in academic settings: • General academic words are used across disciplines (e.g., *develop*, *result, process*, *analyze*)* • Discipline-specific (or domain-specific) words are used predominantly in one discipline (e.g., *hypotenuse*, *mixture, setting, four score*)** • Multiple-meaning words have more than one meaning; sometimes the multiple meanings are vastly different from each other (e.g., matter, significance) * These are considered Tier Two words. ** These are considered Tier Three words.[13]	EL students need extra support in vocabulary learning. For general academic words, make sure that EL students understand their meaning; teachers may erroneously assume that EL students know definition of these words. Discipline-specific and multiple-meaning vocabulary words usually have non-academic meanings, and EL students may not realize that their existing definition of a word is not the one used in the lesson. Multiple-meanings: • *Matter* - Something under consideration (e.g., "what's the matter?") - The subject or topic - (Scientific) Something that has mass and takes up space • *Significance* – - Important - (Statistics) a number that expresses the probability that the result of an experiment or study could have occurred purely by chance

[12] For more on language progressions which provide information on the growing sophistication of these language features, visit dllp.org.

[13] One popular framework that categorizes words was developed by Beck, McKeown, and Kucan (2002). They describe three levels, or tiers, of words in terms of the words' commonality (more to less frequently occurring) and applicability (broader to narrower). Tier One words are frequently and broadly used, and Tier Three words appear less frequently and used in narrower settings. Beck, I. L., McKeown, M. G., & Kucan, L. (2002). *Bringing words to life: Robust vocabulary instruction*. New York, NY: Guilford.

	Key Sub-Features and Definitions	Guidance and Examples
Sentence	Verb tenses reflect past, present, and future time, as well as information on how long events last.[14] Changing verb tenses contribute to confusions when things happen, continue to happen, or have ended. There are 12 verb tenses in the English language: • Present (*I study.*) • Past (*I studied.*) • Future (*I will study.*) • Present Perfect (*I have studied.*) • Past Perfect (*I had studied.*) • Future Perfect (*I will have studied.*) • Present Progressive (*I am studying.*) • Past Progressive (*I was studying.*) • Future Progressive (*I will be studying.*) • Present Perfect Progressive (*I have been studying.*) • Past Perfect Progressive (*I had been studying.*) • Future Perfect Progressive (*I will have been studying.*)	EL students exhibit trouble understanding and using correct English verb tenses, especially students with primary languages that do not have the similar verb tense structures. Complex tense structures can cause confusion in the action that is taking place and contribute to misunderstandings in event order and processes. Teachers should help EL students understand tenses because they convey when events happen in relation to other events and processes. Examples below illustrate the complexity of time and duration for English verb usage. • Present perfect (action going on at the time of speaking): *The students have discussed the problem set as the teacher walks around.* • Future perfect (action that will be going on some time in the future): *The students will discuss the problem set while the teacher walks around.* • Past perfect progressive (an action in the past that began before a certain point in the past and continued up until that time): *Students have been preparing for the year-end tests for the past month.* • Future perfect progressive (action that will be completed before another action takes place): *Students will have been preparing for the year-end tests for at least a month when they take the tests next week.*

[14] Technically, these involve both tense and aspects, but the two are combined here for simplicity. Aspect relates to duration of time (e.g., perfect, progressive).

	Modal verbs are auxiliary (helping) verbs that expresses necessity or possibility. Modal verbs have subtle yet distinct differences in expressing possibility, ability, necessity, or conditionality. Examples of common modal verbs: • Can • Could • Must • Need • Should • Will • Would	Modal verbs change meanings of sentences. Teachers should ascertain that students understand the nuances in meaning. Modal verbs can cause confusion for EL students because they may not be able to differentiate between information that is possible versus required. These differences in modal verbs use can cause EL students to misunderstand information, directions, or processes. For example: • *Teachers must help EL students understand academic language.* Versus • *Teachers could help EL students understand academic language.* The first sentence is a requirement (with use of *must*). The second sentence is optional (with use of *could*).
	Complex and compound-complex sentence structures have embedded clauses that pack information into one sentence, sometimes making sentences denser and harder to understand.	EL students may need explicit instruction deconstructing and creating complex sentences to better understand and write them. • Simple: *Water is found on Earth. Water can occur in liquid, gas, and solid states.* • Complex: *Water, found on Earth, can occur in liquid, gas, and solid states.*
	Nominalizations are nouns that are created from verbs or adjectives. This linguistic resource of turning processes (verbs) into things (nouns) allows writers to densely pack ideas into fewer words and sentences. [15] Examples of nominalizations: produce→*production* explain→*explanation* intense→*intensity*	EL students can benefit from explicit instruction identifying, deconstructing, and creating sentences that contain nominalizations to understand the meaning in sentences.[16] Nominalizations make sentences more complex because: • The most important action word is buried:

[15] Note that verbs and nominalizations, which are words, are included in sentence features. This is because English requires verb for a group of words to be considered a sentence. Use of a nominalization changes the syntactical structure of a sentence, so it is often included as a sentence sub-feature.

[16] Studies have shown positive gains in EL students' reading comprehension and writing skills when there was explicit instruction on nominalizations. See Gebhard, M., Chen, I. A., & Britton, L. (2014). "Miss, nominalization is a nominalization:" English language learners' use of SFL metalanguage and their literacy practices. *Linguistics and Education, 26*, 106-125. Spycher, P. (2007). Academic writing of adolescent English learners: Learning to use "although". *Journal of Second Language Writing, 16*(4), 238-254.

	applicable→*application* evaporate→*evaporation* write→(a/the) *writing* The true power of nominalizations is to turn concrete actions into abstract ideas and make them into clauses in order to link them to other clauses. Nominalizations are a hallmark of academic writing, especially in science. • Example of linking ideas together using nominalizations (nominalizations are underlined): *The polar ice caps are melting. The melting causes sea levels to rise. Because of this rising, animals are losing their habitat.*	- *A comparison was made between the effects of temperature on pH.* instead of - *We compared the effects of temperature and pH.* • Sentences become more abstract: - *This paper gives an analysis of the problem and offers a solution.* instead of - *This paper analyzes and solves the problem.* • Use of the nominalization packs more information into the sentence, especially when embedding a whole process into another process: - *Evaporation is the first step in the water cycle* instead of - *When water is heated, it evaporates; this process is the first step in the water cycle.*

	Key Sub-Features and Definitions	Guidance and Examples
Discourse	Coherence and cohesive devices describe how text and information is related to each other. The following are the common ways that information is linked together (called cohesive devices): • Pronouns: *he, it, this, one* • Discourse connectors: *however, therefore, because, since, such as, but* • Temporal connectors: *first, then, next* • Ellipsis is a word or group of words removed so as to not be too repetitive. *The dog barked and ran.* [Technically, the sentence should be written: *The dog barked and the dog ran.* The second instance of "the dog" is an ellipsis.]	Cohesive devices help with text organization and clarity, but they can sometimes be confusing. The use of certain cohesive devices can add to complexity in the text. EL students may need explicit instruction in noticing the following: • Pronoun chains can be long and have unclear referents: *The students were in the store. They wanted to get school supplies. The boys wanted to buy pens but the girls did not want them.* - "They" refers to students. "Them" refers to pens. • Use of discourse connectors signal important emphasis or changes in ideas in the text: *Teachers should provide instruction in academic language demands. However, academic language demands should not be taught in isolation.* - The use of "however" signals that the following sentence will go against something in the previous sentence.

		• Ellipsis frequently occurs in speech and is often found in writing. Most of the time, there is no confusion in meaning. However, some words, phrases, or whole sentences can be removed, causing confusion. For example: *Karen brought apples and Jose some pears.* The "brought" that is removed may cause confusion as to what Jose did.
	Paragraph and essay structure: • Topic, supporting, and concluding sentences • Introduction, thesis statement, supporting paragraphs, conclusion Informational text features: • Headings, subheads • Table of contents, glossary, marginalia • Graphics, illustration, charts, tables Narrative text features: • Initiating event, raising action, climax, falling action, resolution • Dialogue	Starting from an early age, EL students benefit from instruction and exposure to text features, especially informational text features. Some narrative structures that may be difficult to for EL students to comprehend: *flashback, foreshadowing, dialogue between several characters* (especially when multiple pronouns are used). This is especially true for narrative structures in students' primary language that do not follow common English narrative structures.

Academic language demands can act as gatekeepers to EL students' conceptual development because they can interfere with how students understand the content. Therefore, teachers in all subject areas need to recognize the language demands within a lesson so that they can (1) assure that the lesson will be accessible to EL students and (2) help students develop the language capacity to deal with these demands. In planning lessons, teachers should consider what support EL students may need with the academic language demands of the content – such as, the lesson's key vocabulary, grammatical patterns, and organization of written and oral text (e.g., persuasive essay, scientific presentation, math solution) – and how to provide that support. Some examples of ways teachers can support students' understanding and use of academic language are: stopping and probing for understanding, clarifying language demands where they occur, pre-teaching key academic language features that appear (e.g., providing a mini-lesson on them), or simplifying and rewording directions. By attending to the academic language demands of the lesson, teachers can help EL students access and engage in the discipline-specific content.

Guiding Questions

The guiding questions below can help teachers reflect on the academic language demands of a lesson. The list of questions is not exhaustive but are intended to spark ideas, discussion, and action.

- In reviewing or previewing the materials for the lesson, how accessible is the language in the written texts, spoken explanations, directions, etc. used in the lesson?
    - Are there materials or parts of the lesson that the teacher needs to modify, supplement, or scaffold for EL students to access the content?
- What academic language functions are students expected to use in the lesson? For example, are students expected to write a summary, present a finding to the class, answer questions, etc.?
    - Do some EL students need additional instructions, directions, examples/exemplars, scaffolds etc. to engage in or perform the language function?
- What academic language features used in the materials are likely to cause difficulty for EL students?
    - What is the key academic vocabulary found in the lesson's content? Can some of this vocabulary be previewed or defined for students?
    - What sentence features make reading or listening material difficult? For example, do verb tenses in a text create confusion about time order and sequence of a story? Are the majority of sentences found in a text complex? For science and some informational text, are there nominalizations that need to be previewed for students?
    - Are cohesive devices hard to follow when reading a text? For example, can students use cohesive devices properly when producing written text?
    - Are narrative and text structures easy to follow or are the structures more obscure? For example, can students recognize the text structures if needed in order to help them comprehend or write about the text?

Teacher Tip

Research shows that it is ineffective - and inauthentic - to teach language features and functions in isolation and apart from content. In the course of a lesson, there may be times when teachers will need to highlight specific features or functions (e.g., teach a mini-lesson on pronouns and referents or how to give an explanation). However, teachers and students should go back to the text or activity to ensure that the learning of a specific language feature or function helps students comprehend the content.

Additionally, some teachers tend to overemphasize isolated, word-level academic language. Focusing solely on vocabulary development may communicate to students that vocabulary words alone are key to understanding content. Although being able to define academic vocabulary is important to conceptual understanding, studies show that EL students benefit from rich vocabulary instruction in which students have opportunities to encounter words when reading longer text, engage in extended discussion and conversations, and use vocabulary words in all domains (i.e., listening, speaking, reading, and writing). Furthermore, research shows that students' knowledge of sentence and discourse structures is as important, if not more so, than vocabulary in comprehending complex information and ideas. Proficient language users understand how words are organized through various syntactic and grammatical structures and use these structures to form a variety of sentence types. Extended text are well-organized by connecting ideas together through use of cohesive devices and text structures. EL students benefit from direct instruction in learning how these three levels of academic language, along with language functions, work together to convey meaning.

Example

A fifth grade teacher will have her students read the following passage on capuchin monkeys as part of a lesson on reading informational text.[17] After students read the text, she will ask her students to agree or disagree with this statement: *Capuchin monkeys make good service animals*. The learning goals and success criteria for this lesson are:

- Understand how to support a point of view using evidence from the text.
  - Determine which sentences in the text support your point of view and which contrast with your point of view.
  - Quote accurately from the text.
- Understand how to produce a clear and coherent paragraph.
  - Include a relevant topic sentence.
  - Develop the topic with facts, definitions, concrete details, quotations, or other information and examples related to the topic.
  - Use appropriate and precise academic vocabulary to explain your view point.
  - Use appropriate discourse connectors to organize your writing.

[17] Excerpted from Smarter Balanced Assessment Consortium. (2014, May 16). *The English language arts practice test scoring guide – Grade 5 performance task*. Retrieved from http://www.smarterbalanced.org/wp-content/uploads/2015/11/G5_Practice_Test_Scoring_Guide_ELA_PT.pdf.

To plan for her lesson using this text, the teacher read and identified the academic language demands that could pose challenges to her students, particularly EL students, in comprehending the text. She first noticed that the language function of this text is to inform the reader about capuchin monkeys and the pros and cons about using these wild animals as service animals. Then she annotated the text, marking the academic language features that may cause comprehension problems for her students, as shown in the graphic below.

Text	Academic Language Features
Capuchin monkeys are very small. Some weigh less than eight pounds, even when fully grown. They are also extremely smart. In the wild, they have shown the ability to pick up tools and use them* to solve problems. Their hands can easily carry small tools. This makes it easier for them to handle modern items such as remotes and cell phones. Although capuchin monkeys are smart and are able to handle small tools, not all types of monkeys are ideal to use as service animals. Some monkeys, such as howler monkeys, are too large or strong. For example, a monkey could suddenly hurt a person if it got angry or frightened for some reason. While some people believe capuchin monkeys are wonderful service animals, not everyone agrees. Capuchins are small, easy to train, and are able to bond, or form close relationships, with humans. However, they* are still, in the end, wild animals. April Truitt, director of the Primate Rescue Center in Kentucky, says that having a wild animal in your home may put both the animal and the owner at increased risk of getting injured. She points out that it is possible for capuchins to become violent suddenly and this can be a danger to their owners and others. *[Note: In the original source, the text continues for about another page on capuchin monkeys as service animals.]*	Word: • Multiple meanings: *wild* (same word, different parts of speech) • Academic vocabulary: *such as* Sentence: • Verb tense changes in first paragraph and modals: *weigh, have shown, can* • Compound-complex sentences: "*Although capuchin monkeys are smart and are able to handle small tools, not all types of monkeys are ideal to use as service animals.*" "*She points out that it is possible for capuchins to become violent suddenly and this can be a danger to their owners and others.*" • Compound-complex sentence with an "if…than" structure: *For example, a monkey could suddenly hurt a person if it got angry or frightened for some reason.* • Long, compound sentence: *Capuchins are small, easy to train, and able to bond, or form close relationships, with humans.* Discourse: • Long pronoun referent chains: *Some, they, they, them* (pronouns marked with an asterisk [*] may confuse some readers as to what the pronoun refers to) • Unclear pronouns: *this* (refers to the entire sentence before the word), *it* • Meaningful discourse connectors: *although, for example, while, however* • Reported speech: *April Truitt…points out that…*

By identifying the functions and features prior to lesson planning, the teacher is armed with knowledge on how academic language makes the text and task demanding. The teacher realizes that her beginning and early intermediate EL students may have trouble with the pronoun chains which would interfere with comprehension. She makes a note to ask what certain pronouns are during the course of a class read aloud to gather evidence if this is a confusing feature. She will also ask the class to turn and talk on why the author includes an indirect quote from April Truitt. In conferencing sessions with certain EL students during the course of the lesson, the teacher plans to check if they know the meaning of words she's identified as being multiple meaning and academic. Determining the academic language demands of the lesson allows the teacher to better plan instruction that both addresses potential challenges with language and areas to help EL students develop language skills.

Principle 2: Build upon students' background knowledge

EL students have diverse backgrounds and differ in their prior educational experiences, home language, and cultural practices. Designing teaching and learning opportunities that build on EL students' home and cultural experiences – their funds of knowledge –[18] as well as their prior content knowledge, can make instruction relevant and meaningful; increase students' interest, participation, and learning; and improve teacher-student relationships.[19]

The table below is organized by four categories of background knowledge.

- Academic/content knowledge – Teachers need to meet students where they are in their content knowledge and skill are if students are to achieve classroom learning goals. By knowing where students are in their content learning and what supporting knowledge and skill they have to engage in classroom instruction (for example, proficiency in reading and writing), teachers can establish appropriate goals, select appropriate materials and activities, and design instructional tasks that will be in students' zones of proximal development.[20]
- Educational experiences – Knowledge of students' prior educational experiences is important because students' success in school depends on social and emotional learning as well as academics. School climate; students' sense of belonging; their prior

[18] The historically-accumulated skills and knowledge that students use to navigate their daily lives (Moll, Gonzalez, Neff, & Amanti, 1992).
[19] See Gonzalez (2005); Guitart & Moll (2014); Moll, Soto-Santiago, & Schwartz (2013); and Zipin (2009).
[20] This refers to a level of learning that students can achieve through collaboration with peers or with teacher scaffolding (Vygotsky, 1978).

academic success; their relationships with teachers; and attendance or disciplinary history all play roles in how students learn in school. Sometimes teachers need to plan instruction that will counteract students' prior educational experiences. Additionally, for newcomer or migrant students, understanding their prior educational experiences is especially important in acclimating them to practices in U.S. schools and those specific to the classroom.

- Language development – Students' proficiency in English, their facilities with specific academic demands of the discipline, and their home language are important information for teachers when setting learning goals and planning for instruction and adapting and accommodating tasks and materials for students. Knowledge of student language development also is important in grouping decisions. For example, for small group discussions, teachers may want to be sure that each group contains students at diverse levels of language development.
- Cultural knowledge, values, and practices – Acknowledging that some students may come from cultural traditions different from the predominant school culture is a first step in culturally responsive teaching.[21] Teachers can help students learn by understanding how students communicate and receive information at home and how cultural expectations can shape thinking. This includes the idea of funds of knowledge, or the cultural knowledge and skills students use on a daily basis.

The table below provides considerations to help teachers think about key ideas related to the various types of background knowledge when planning instruction. It also provides some ideas on how to gather information on EL students' background knowledge and what activities may be helpful in connecting with students in these four categories.

[21] Landson-Billings (1994).

Category	Key considerations	Ways to assess students' background knowledge	Ways to build upon students' background knowledge
Academic/ Content Knowledge	• Academic language • Knowledge of concepts, topics, skills, and information • Existing supporting knowledge and skill (e.g., reading, writing)	• Results on formal tests, inventories, and teacher assessment • Writing prompts and samples • Prior grades • Portfolios (cumulative) and report cards • Student conferences • Information from former teachers	Help students to connect the current lesson with what they've already learned through: • Pre-tests • Frontloading through visual media and class discussion • Quick writes • K-W-L charts • Think-Pair-Share • Artifacts, realia
Educational Experiences	• History of schooling: continuous or interrupted • Social and emotional learning: self-efficacy, resilience, perseverance • Teacher relationships • Sense of Belonging • Attitudes toward school	• Student and school inventories and surveys • Student focus groups • Student conferences • School involvement survey • Information from former teachers and school staff	Help assure students are positive about school and learning and know its routines: • Grouping structures to enhance participation and belongingness • Regular, positive school-home communication • Student agency in classroom responsibilities (helper, leader, facilitator, etc.) • Provision of consistent feedback to support social and emotional development
Language Development	• Home language literacy • Language proficiency levels • Academic language	• Performance on English Language Development (ELD) assessments • Student interviews/conferences • Language inventories • Writing samples • Observation (student discussions/interactions) • Measures of language development: meaning, form, and use[22]	Help assure that students get the language support they need through: • Grouping structures • Multiple representations/visual supports • Repeated classroom routines • Peer and teacher modeling • Extended oral discourse • Sentence frames and starters • Graphic organizers • Targeted instruction and strategic questioning

[22] Measures for meaning include native language equivalents, synonyms and antonyms, and meanings of prefixes, suffixes, and roots. Measures for form attend to word families, words with the same prefix or suffix, roots, and grammatical patterns. Finally, measures for use include general and metaphorical use, idioms, puns and jokes, etc.

Cultural knowledge, values, and practices	• Home/community practices
	• Cultural resources
	• Family engagement
		• Home/family visits and interviews
		• Community surveys
		• Autobiographies (written and digital)
		• Artifact-based interviews[23]
		  - self-portraits
		  - relational maps (significant circle)
			• Design units or curricular modules that link to students' funds of knowledge
			• Student-led research projects
			• Math: culturally relevant word problems
			• Text selections connected to student/family/community
			• Plan classroom and school events connected to the community
			• Kitchen science[24]
			• Apprenticeship-based learning (students learning from other students, teacher learning from students)
			• Civic engagement projects to address issues in the community
			• Storytelling and oral history projects
			• Regular positive school-home communication
			• Invite families into the classroom

Guiding Questions

- What background content and academic knowledge do students have/need to have to access the lesson? Do students have the necessary pre-requisite knowledge and skills to be successful in reaching the lesson goal?
- Does students' background knowledge contribute to some misconceptions and preconceptions of the lesson's content? How can teachers surface and address these misconceptions and preconceptions?
- What language supports may be necessary to meet students where they are in their language development?
- How can lesson activities and interactions also support students' socio-emotional learning and positive attitudes toward school and class?

[23] Teachers and researchers have found the following activities to be very helpful when gathering information about students' funds of knowledge: student self-portraits; maps of students' homes, communities, and favorite places in the world; autobiographies (both print-based and digital); and diagrams, such as circles in which students draw or list their cultural resources.
[24] Clegg, T., & Kolodner, J. (2014). Scientizing and Cooking: Helping Middle-School Learners Develop Scientific Dispositions. *Science Education, 98*(1), 36-63.

- What home and community resources and knowledge can teachers leverage to help students understand the lesson content?

Teacher Tip

To gather insight about their EL students' cultural knowledge, values, and practices, teachers may seek to learn about parents' employment, household management, religious affiliations and practices, linguistic and cultural practices, sports or other out-of-school activities, and the problems facing or opportunities embedded in the community. Regularly speaking with students and their families, conducting informal interviews, distributing questionnaires, and conducting pre-lesson surveys are just a few of the ways teachers might learn about students and their backgrounds. After gaining insight into their students' lives, teachers can use these new understandings to design meaningful and contextualized activities for students. For EL students, understanding their cultural backgrounds is especially important and can have positive effects in other areas of students' school life and academic achievement.

Example

A middle school math teacher in San Diego, CA regularly engaged with the families and community mentors of her students through home visits and her involvement in community programs. Through these interactions, the teacher discovered that many of her students worked with their parents on the weekend selling small trinkets, jewelry, clothes, party supplies, or preparing and selling food. Leveraging this information, the teacher designed a semester-long, project-based entrepreneurship instructional plan that not only incorporated 8th grade math standards, but also was relevant to students' lives. Students learned math content and academic language throughout the semester while building their own small business and sharing their expertise with their peers and teacher. The culminating assignment included a school event in which community and family members, teachers, students, and school administration celebrated and purchased students' items.

Principle 3: Design and scaffold deeper learning tasks that integrate listening, speaking, reading, and writing domains

El students, like all students, need to be engaged in challenging and meaningful tasks if they are to develop the deep conceptual understandings and critical thinking required in today's college and career ready standards. However, because these tasks are often linguistically demanding, requiring complex language reception and production, they provide both special

challenges to EL student success and important opportunities for EL students to deepen their language development.

By providing *strategic* supports – also known as scaffolding – teachers can facilitate their EL students' engagement without diminishing the content quality and rigor of the tasks in which students are engaged. Being strategic is very important, as too often, the language and conceptual demands of activities used for EL students are simplified to a level that leaves little opportunity for EL students to learn complex content, develop rich conceptual and linguistic understandings, and demonstrate their progress. Instead, teachers need both to routinely integrate all four language domains – listening, speaking, reading and writing – into every lesson and to use appropriate scaffolding techniques as needed, to enable EL students to fully participate and achieve lesson goals.

Listening, Speaking, Reading, and Writing Domains

Integrating reading, writing, listening, and speaking activities into lessons enables EL students to practice and deepen their capacities in all four domains and to benefit from these multiple channels in their learning. Too often, however, teachers privilege one or two domains for students to make sense of the content or to demonstrate their learning, and ignore the others. Yet regardless of discipline, each of the domains can be used in any lesson to support content learning goals (e.g., listening to direct instruction, participating in discussions, reading text, and writing notes). The example at the end of this section shows how one primary school teacher purposely integrates all language domains in a math lesson.

Scaffolds

Teachers use scaffolds to bridge any gaps between what students know and are able to do and what they are expected to know and be able to do. Language-specific scaffolds are used to support EL students and help them navigate academic language demands as they engage with, comprehend, and communicate specialized disciplinary knowledge and skills. The following table provides some examples of language scaffolds that would support students in the four language domains.

Listening	Speaking
- Use visuals and physical gestures when providing verbal instruction - Provide students with written supports to accompany oral directions or instruction - Ask students to paraphrase what others have shared during discussion	- Use sentence frames to support student discussions - Use graphic organizers to provide students with an opportunity to write and organize their ideas prior to discussing - Ask students to paraphrase others' discussion remarks
Reading	**Writing**
- Model how to annotate text for main ideas and supporting details during instruction - Ask students to annotate text - Provide or have students create graphic organizers to support comprehension when reading - Provide an outline to orient students to important information in the text - Use anticipation guides as a pre-reading strategy	- Model the writing process with students - Provide and analyze written exemplars - Teach students how to use or create different graphic organizers to organize their writing - Teach students to notice writing techniques used by others - Conference regularly with students during the writing process, providing students with targeted feedback on their writing with explicit guidance on how to improve it - Provide sentence frames or essay templates

Guiding Questions

- Do students have meaningful opportunities to listen, speak, read, and write about the lesson content? Are students provided with sufficient time to use all four language domains?
- What language scaffolds will students need to access the content of the lesson?
- What language scaffolds might students need to complete lesson tasks?

Teacher Tip

Be careful when implementing scaffolds. Too often, scaffolds become "add-on" activities that do not serve the lesson's learning goals. For example, teachers sometimes over rely on sentence frames and require all students to continue to use them during discussions or written work when they are no longer needed. In these cases, using sentence frames may stifle language production rather than support students' language development. Another common example is when teachers provide students a graphic organizer but do not teach the thinking behind the use of the organizer. In this case, teachers emphasize the product instead of the process. When including scaffolds in lesson activities, teachers should keep the purpose of the task front and center in order to support student learning. Scaffolds are considered temporary supports to help students reach higher levels of achievement that they otherwise could; they should be discontinued once students have internalized the skill or knowledge.

All EL students, regardless of language proficiency, benefit from activities that require them to use their oral language skills, as the development of this one domain greatly influences the development of the other three. Moreover, since oral language development is critical to literacy development, teachers should provide and scaffold many opportunities for students to discuss content and learning orally, with peers and the teacher.

Example

In a first grade dual-language immersion class, Ms. Lopez is teaching her first grade students how to compose and decompose numbers in an additional problem. Today's lesson is solving a word problem in which students have to add two numbers, show their work visually, then write an explanation of how the student solved the problem. Ms. Lopez begins her lesson by sharing the learning goals and success criteria, which she has read to the students and provides each table group with a written version of them.

After her direct instruction on reading the word problem, she has students work independently on a shared problem. As they work, she walks around to conference with students and has students explain their solution orally. The students have been working on how to explain math solutions using sequencing words (e.g., first, next, then). One student, Jose, selected a set of numbers from three sets that were given. He wrote an explanation on how he solved the addition problem (see box to the right).

Gael has **340** dinosaur stickers. His mom gives him **226** more stickers. How many stickers does Gael have together?

Choose from these number choices:
(12, 29) (340, 224) (57, 44)

Write about how you solved it
(Explain your mathematical thinking and the strategies you used)

First I wrote the 340 and the 226. I decomposed the 340 and the 226. Then I add the 300 and the 200 and I brought the 40 and the 20 together and they made 60. Then I brought the 0 and the 6 together. Then I put the 500 and 60 together and get 560 and then I brought the 560 and the 6 and got 566.

Ms. Lopez asks Jose to read aloud his explanation and notices that Jose was using the same sequencing word, *then*, repeatedly. She suggests that Jose think of different sequencing words to describe – and be more precise – about steps in his solution. Ms. Lopez has Jose look at sentence frames and a word bank of sequencing words, two scaffolds she created for students who need additional help in their oral and written explanations.

Near the end of the lesson, students pair up and explain their solution to each other. Most students will have different strategies used to solve the problem, and explaining their unique solution allows for pairs of students to listen and speak. Some students have different answers and must come to a consensus on a correct answer.

Lastly, Ms. Lopez ends the lesson with one or two students sharing their solutions with the entire class. Students who are listening provide feedback with something they liked, something they noticed, and a suggestion for next time. Student explanations are posted on a classroom wall, and for the next day or two, students can read the explanations and have an opportunity to write a response on a post-it note that is tacked on to the student work.

Principle 4: Provide opportunities for student participation through extended oral discourse and structured collaboration

EL students can both acquire and demonstrate their learning through extended oral discussions (or discourse, as it's commonly called).[25] Extended discourse requires teachers to design lessons that provide time for structured teaching and learning interactions. When EL students engage in discourse, they work with peers to solve a problem, construct an explanation, provide a justification, build on the ideas of others, or express their thinking during a learning activity. Collaborative opportunities are particularly important for EL students because they expand opportunities for students use language to construct meaning, show content understanding, and develop language.

Extended Discourse

Creating opportunities for extended discourse includes giving EL students tools and knowledge to participate in discussions. EL students may benefit from conversation prompts to help them engage substantively with teachers and peers. Conversation prompts list possible questions that students can ask of others, such as:

[25] The use of discourse in this principle is very similar to how it is used in Principle 1. Both refer to text—oral and written—that is more than a sentence long. Student answers to questions that require a few words or one sentence does not qualify as discourse, extended or otherwise.

- Asking for feedback or help
    - "I would like your help in understanding _____."
    - "Can I get your feedback on _____?"
- Giving feedback
    - "I like the way you _____."
    - "I noticed that you did/made/wrote _____."
    - "One suggestion I have for you is _____."
- Receiving feedback
    - "I agree with you that I should/need to _____."
    - "I'm not sure I agree with your suggestion because _____."

Teachers should model extended discourse, either by rehearsing a conversation with a more advanced student, having a pair of students discuss a topic in front of the class, or analyzing a video of adults or other students engaged in classroom discussions. Students should notice the types of questions asked and how to take turns in speaking. Additionally, certain language functions (e.g., providing an explanation, sharing a process) and tasks (e.g., class debate) lend themselves naturally to more extended discourse between students.

Collaboration

Collaborative opportunities can involve a variety of group structures, ranging from pairs, small groups, to whole group. Student groupings should be dynamic, depending on the task and learning goals. It is also important for teachers to design groupings that ensure EL students have the chance to take on facilitator and leadership roles. For example, students can be grouped heterogeneously by math proficiencies when they work on complex math problems. In a science team, students with different language proficiencies can support modeling explanations and building students' vocabulary. Or, teachers might sometimes pair students of different reading abilities to push medium ability students to perform at higher levels. They might also create a small group of EL students at the same English proficiency level to work together to read challenging text at their level. These are a few considerations.

Successful collaborative opportunities depend on EL students' familiarity with collaboration. Simply grouping or pairing students together does not create collaboration. Teachers should provide students with examples, norms, and guidelines on good collaborations. Assigning individual roles in groups with clear definitions are helpful for students in collaborations. Collaborations also work best when teachers create quality and challenging tasks that address

deep learning of the content. For example, having students work together to complete a worksheet on coordinate pairs is not collaborative. Instead, having students create a treasure map on a coordinate plane is a more complex and engaging task for collaboration.

Guiding Questions

- What supports/scaffolds will students need to engage in extended oral discourse? In collaborative groups?
- What types of grouping structures will provide students with opportunities to participate in extended discourse? Take on different roles (facilitator, scribe, presenter, etc.)? Build confidence with language use?
- Do students have the knowledge and skill they need to successfully collaborate? If not, how can these be developed? What structures will support success?
- Does the lesson include complex and engaging tasks in which students can collaborate with peers?

Teacher Tip

Structured opportunities for collaboration are valuable for teachers and students. Teachers can use collaborative opportunities to both develop and gauge student thinking and understanding. The following table provides an overview of the value of structuring opportunities for collaboration.

Teacher Benefits	Student Benefits
Gain valuable information about students' current level of understanding	Develop ideas and build understanding when talking with peers
Observe students construct meaning and build knowledge	Inform/develop current understanding when listening to peers' ideas
Gather evidence to inform future lessons	Develop language and evidence-based reasoning

Teachers can also consider using talk protocols to encourage discourse through structured collaboration. Talk protocols are rules and procedures that give students a shared understanding of how to contribute and participate in group discussions. One example of a talk protocol might be norms for participating in whole group classroom discussions. Another example might be the use of explicit roles to guide group collaboration. Such roles might include a discussion facilitator whose job is to push people to contribute ideas, a group reporter

who is responsible for sharing the group's work, and a recorder who is responsible for documenting the group's discussion, to name a few. They can be used flexibly to ensure all voices are heard and everyone has an entry point to the collaboration. This is particularly important for long-term EL students, who typically may not engage – or be expected to engage – in academic conversation.

Example

The following example illustrates how one teacher, Mr. Dominguez, uses discourse and collaboration to support his EL students' content and language learning.

Mr. Dominguez has engaged his chemistry class in a series of lessons about chemical reactions. As part of today's lesson, Mr. Dominguez has asked the class to read a text about chemical reactions. At this point in the lesson, students have read and annotated the text. Mr. Dominguez expects students to understand the clues, or indicators, that will help them determine if a chemical reaction has occurred (color change, change in odor, formation of a precipitate, change in temperature, formation of gases).

To begin the discussion, Mr. Dominguez conducts a short science demonstration. Students observe what happens when he adds two different liquids to a beaker. When the demonstration is over, Mr. Dominguez asks, "How do you know if a chemical reaction took place?"

Mr. Dominguez directs students to discuss in their table groups and refer to the text they have just read. Mr. Dominguez walks around the classroom, listening to students' table group conversations.

Student A:	What do you guys think? How do we know if there was a chemical reaction?
Student B:	Hmm. Well, when he mixed the liquids, there was a change in color and…
Student C:	and we saw that the stuff bubbled up, out of the cylinder.
Teacher:	Say more about change in color and stuff bubbling up.
Student A:	Yeah, so I'm looking at the article we read, and I notice that those are two things that were mentioned as evidence that a chemical reaction occurred.
Teacher:	Mmm-hmm.
Student C:	Well, when stuff bubbles up it means that the two liquids you put together are reacting. And that is evidence of a chemical change. Especially because it is not the only evidence, right?
Student B:	Yeah – I mentioned the color because that's something we saw right away. The stuff bubbled and the color changed. We read here on page

15 that chemical change occurs because the composition of substances has changed. And they change when bonds break.

Student A: How about precipitate? What is that?

Student B: I'm not sure.

Student C: What page is that on?

Mr. Dominguez carries a clipboard and takes the following notes as he listens to students discuss with each other. His checks off the evidence that students reference during their small group discussions. He notes what was confusing or unclear to students and possible issues. This information helps Mr. Dominguez know what to address when students discuss in the whole group.

Table 1:

✓ Color change	O Precipitate
✓ Gas formation	- confusion in text?
✓ Chemical change def	- language scaffolding?
✓ Know to return to text (rereading)	- vocab issue? **REVISIT**

In this example, Mr. Dominguez sets up a learning situation that aimed to connect students' understanding of chemical reactions from multiple sources (text and demonstration). He structured an opportunity for students to talk to each other before bringing them all together for a whole group discussion. He used an open-ended question to set up a purpose for talking and collaboration. As students talked with each other, Mr. Dominguez gathered evidence of students' developing understanding. This information was invaluable because he understood where students were in their thinking as well as what he needed to clarify and address during the whole group discussion.

Principle 5: Use formative assessment to support both language and content goals

Formative assessment is a classroom-based instructional process that integrates teaching and learning in a deliberate, analytical way. Using formative assessment, teachers lay out a pathway to student success on lesson learning goals; continuously check on student progress along the way; and take immediate pedagogical action, when needed, to assure a successful journey. Formative assessment puts lesson learning goals and learning progress front and center throughout lesson planning and implementation. For EL students, formative assessment is

directed at both content and language learning goals and informed by students' English language development (ELD) status. Formative assessment also provides a framework through which the four previous principles can be incorporated. The five elements in the formative assessment planning and implementation process are:

1. Establish clear lesson learning goals and associated success criteria
2. Plan lesson activities that will provide evidence of student learning
3. Analyze evidence to evaluate whether students are progressing as expected
4. Be prepared to take appropriate pedagogical action based on evidence of learning
5. Actively involve students in in the formative assessment process

These five elements are described in more detail below.

1. Establish clear lesson learning goals and associated success criteria

Learning goals. Learning goals describe specifically what students should learn in a lesson. Unlike standards, which describe a year's work, learning goals are "lesson-size" expectations, drawn from the learning progression(s) that will take students from where they are at the beginning of the year to end of year success on grade level standards. These lesson learning goals must meet students where they are in their learning.

For EL students, lesson learning goals may include both content goals and language learning goals. The latter, for example, might focus on particular academic language demands evident in the lesson (see Principle 1) and/or explicit goals in the reading, writing, listening, and/or speaking domains (See Principle 3).

In any event, lesson learning goals for content and/or language development break the standards down into teachable, lesson sized units. For example, a Grade 8 math standard on functions is: *Understand that a function is a rule that assigns to each input exactly one output. The graph of function is the set of ordered pairs consisting of an input and the corresponding output*. The learning goals for one lesson related to this standard can be:

Learning goal: *Understand that a function describes a relationship and that for every input there is exactly one output*.

Learning goals and success criteria must meet students where they are in their content knowledge and language development (see Principle 2).

Success criteria. Success criteria are the specific, observable behaviors through which students will demonstrate their progress toward and achievement of the learning goals. Learning goals convey to students where they are supposed to go, and success criteria tell them exactly how to get there. They lay out the lesson pathway to success of the learning goal. Extending the example above, the success criterion for each learning goal would be:

Success criterion: *Correctly identify contexts that are or are not functions.*

If a teacher establishes learning goals for both language and content, then there will be success criteria for each. For example, a third learning goal, and its associated success criteria can be:

Language learning goal: *Understand why functions are important (predictability).*
Success criterion: *Correctly explain that functions are important because they allow exactly one output (y) to be predicted for each input (x).*

Even absent explicit language learning goals, teachers may need to augment their success criteria for EL students to assure that they have surmounted the academic language challenges that students are likely to encounter. Or success criteria for EL students may need to be scaffolded (see Principle 3). For example, for the success on correctly identifying contexts that are or are not functions, the teacher can model and provide additional explanation that show that a function does not require that outputs be unique (such a requirement is called a one-to-one) with more examples and non-examples of functions. The teacher may also need to provide definitions to general vocabulary words, like *contexts*, or words that appear in the worksheet during the lesson.

Share learning goals and success criteria with students. Because the formative assessment process places great importance on students' active involvement, learning goals and success criteria are always shared with students and are written in a way that students can understand and engage with. For EL students, learning goals and success criteria may need additional explanation and scaffolding in verbal, pectoral, and/or written form.

2. Plan lesson activities that will provide evidence of student learning.

In the formative assessment process, each lesson activity or task is designed not only to help students progress toward the learning goal, but also to provide evidence of how they are doing. What students do, say, make, or write in response to lesson activities provides relevant evidence when lesson activities are clearly mapped to learning goals and success

criteria. Some ways to elicit evidence include: engaging students in high quality individual or group written or oral tasks that reflect the success criteria, observing students at work independently or with others, questioning and probing, and discussion.

In planning lesson activities that will provide evidence of student learning, keep in mind Principle 3 and Principle 4. Principle 3 advises that every lesson include activities in all four language domain and suggest how each may need to be scaffolded for EL students. Activities in each of the four domains can be purposefully designed to provide evidence of learning – for example, student responses during reading or listening to assure they are able to surmount the academic language demands and comprehend the content; what students write or say during writing and oral engagements and the extended discourse recommended in Principle 4. Principle 4, moreover, suggests that lesson activities utilize a range of grouping structures.

The correspondence between lesson activities and success criteria is essential. Not every activity needs to yield evidence of a success criterion, but every success criteria needs an activity to provide evidence of success. In fact, sometimes the success criteria directly indicate what the evidence providing activity should be. Or, sometimes a single activity can provide evidence for more than one success criterion. For example, an oral presentation might provide evidence on both content and English Language Arts as well as ELD goals. This is particularly important for EL students where teachers need to be attuned to both language and content issues.

Preplanning activities and evidence gathering opportunities is important for smooth-running lessons, but not everything can be preplanned and teachers of course will want to capitalize on and use spontaneous evidence that emerges during the course of a lesson.

3. Analyze evidence to evaluate whether students are progressing as expected.

The purpose of gathering evidence is so that teachers can analyze it to understand where students are relative to the lesson learning goal and success criteria. Based on their analysis, teachers can make informed decisions about next steps and help insure students' success.

Given the range of goals and criteria with which teachers may be dealing, it is difficult to provide precise advice on how to analyze the on-going evidence. Some rules of thumb are:

- *Start with a firm idea of what success on each criterion looks like*. What is the quality of what students will say, write, or do that will convince you the teacher that the student has reached success. What specifically and substantively needs to be in the response? For example, if the success criterion is that students can explain a major theme in Charlotte's Web, what should a good explanation look like? Often times with their knowledge of and experience with their students and with the lesson, teachers can backward chain from the desired response to responses that indicate common challenges and misconceptions or answers that are missing specific aspects of the desired response.
- *Keep the focus on your learning goals and success criteria*. Most all evidence will provide a wealth of evidence about student learning, including evidence that is tangential to the lesson learning goal. It is easy to get distracted, but in analyzing evidence keep your eye firmly on the lesson goal and success criteria that are being advanced in the lesson. (Sure, you may notice something tangential that is important for future lessons, and of course note it, but the purpose here are analyses that will directly help you help students reach success on the goals.)
- *Compare evidence to likely range of student responses*. For lessons teachers have taught before, they likely know the range of student responses the lesson is likely to produce and, as above, are attuned to the misconceptions, knowledge and skill gaps, and challenges that some students are likely to face during the lesson. Analyze the evidence relative to this range.
- *Use multiple sources and in-the-moment evidence*. It's always a good idea to analyze evidence from multiple sources to get an accurate picture of where students are in their learning. For example, in circulating while students are working on a task, teachers can observe what difficulties some students are having and probe for understanding probe those students with additional questions to discover more specifically what learning gaps may exist. Some student responses may be a fluke – either indicating understanding that is not there or indicating a gap that does not exist. When teachers doubt their analysis of the evidence, it's always good, if possible, to probe further and fill in with spontaneous evidence.
- *Take account of students' prior knowledge and experience*. Teachers do not interpret evidence in a vacuum, as Principle 2 suggests. They know their students and can leverage their knowledge of family and community practices and of students' language development when interpreting what the evidence means.

Teachers may need to probe student responses for language issues to see whether gaps may be related to content understanding and or language.

4. Be prepared to take appropriate pedagogical action based on evidence of learning.

Teachers' analysis of the on-going evidence informs their immediate steps to help students fill in any gaps in their learning. This pedagogical action might be taken in the moment in the form of feedback to the students or an instructional adjustment. Or it may be that the teacher uses the information to plan and take pedagogical action in the next lesson. Teachers might also find that the evidence shows that student learning is on track to meet lesson learning goal and success criteria and so they may continue with the lesson as planned.

In taking next instructional steps, teachers consider what they have learned about their students' learning based on their analysis of the immediate evidence; what they know about each student, based on the student's learning experiences, culture, and dispositions; and what teacher know about the progression of learning – the sequence of learning steps – that will take students from where they are to the learning goal.

With these considerations in mind, teachers determine what pedagogical action will best serve students' learning. Among the options are questioning students to better understand the source of challenge; providing feedback to students to clarify their thinking and help them resolve their misunderstanding or misconception; prompting or scaffolding student responses to help them fill in the gaps; modeling a response that meets the success criterion; direct instruction through telling, directing and/or explaining. For EL students, pedagogical steps may include language supports (see Principle 3). In the moment responses might include individual conferences, group feedback, and/or grouping students for differentiated instruction. Sometimes responding to evidence means interrupting the lesson to provide feedback to the whole group or asking a peer to share their thinking.

Providing immediate, specific feedback based on thoughtfully collected and interpreted evidence is a hallmark of formative assessment.

5. Include students in the formative assessment process by actively involving them in Peer and Self-Assessment.

Students are an integral part of formative assessment. Peer and self-assessment foster students' responsibility for their own progress and increase motivation. When students understand and use learning goals and success criteria, they are well-positioned to take an active part in peer and self-assessment, reflect upon their own learning as they are learning, and build autonomy and agency to progress towards their goals.

Teachers can help by providing opportunities, structure, support, and modeling. As mentioned previously, teachers should use additional descriptions and explanations to ensure that EL students understand the learning goals and success criteria. Evidence of where the students are in learning should also be communicated to students in a meaningful, relevant, and actionable way so that students can use the evidence to monitor and self-assess their learning and progress and engage in partner assessment.

Guiding Questions

The following guiding questions relate to each of the five formative assessment elements presented above. Guiding questions also reflect the ideas raised from the first four high-leverage principles.

1. Establish clear lesson learning goals and associated success criteria.
    - Are learning goals and success criteria written in ways that EL students can understand?
        - Would EL students be able to comprehend the learning goals and success criteria so that they know what they are learning and how they are achieving that learning in the lesson?
        - What are the language and literacy demands are found in the learning goals and success criteria?
    - Are language-related lesson goals and success criteria included either to help EL students achieve the content learning goals and/or to help them achieve ELD goals?
    - Should learning goals and success criteria include relevant listening, speaking, reading, and/or writing domains?
    - Are content- and language-specific learning goals and/or success criteria shared and communicated to EL students in an understandable, meaningful, and relevant way?

2. Plan lesson activities that will provide evidence of student learning.
    - What tasks/activities would help students develop and elicit evidence of EL student learning relative to success criteria? In content, language, and/or a combination of the two?
    - Do lesson activities include listening, speaking, reading, and writing?
    - Do lesson activities allow students to participate in meaningful discourse and structured collaboration?
    - Do lesson activities include opportunities for extended discourse? For varied grouping?
        - Do students have opportunities to make meaning of content and language instruction through various participant structures (whole group, small group, pairs, and individually)?
        - Are students given opportunities to engage in participant structures that are meaningfully and appropriately designed to include students with the same native language from diverse proficiency levels and/or students with diverse native languages?
    - How do students' language and cultural background intersect with the linguistic and content demands of instruction? Tasks? Evidence-gathering opportunities?
    - In what ways do tasks and evidence-gathering strategies encourage and support students in the process of building upon their linguistic and cultural resources?
    - What language supports have been provided for EL students? More specifically, do students have opportunities in the tasks to:
        - Learn language and content from each other in a purposeful, relevant, and meaningful way?
        - Learn the structures and routines of disciplinary-specific discourse?
        - Leverage their linguistic and cultural resources and knowledge?
    - What scaffolds have been provided for EL students (e.g., diagrams, visual supports, organizers, strategic questioning)? Are these scaffolds aligned to learning goals? More specifically, do these scaffolds:
        - Allow students to express their ideas and thinking?
        - Focus more on supporting reasoning, comprehension, and communication, and less on addressing imperfect language?
    - What lesson features (e.g., language supports and scaffolds) should be reviewed and improved to ensure students have opportunities to engage with the academic language of the lesson? (See Principle 1.)

3. Analyze evidence to evaluate whether students are progressing as expected.
    - What would an example of good student work look for each success criterion? What characteristics would the work have, taking into consideration students' prior knowledge and language development? It is important to think about what good student work would like for content and language development separately as well as together.
    - What content and/or language challenges are likely to arise for some students?
    - How might students' cultural backgrounds influence how they respond?
    - How might gaps in content knowledge be differentiated from those related to language demands?

4. Take appropriate pedagogical action based on evidence of learning.
    - What probing may be necessary to differentiate language versus content challenges?
    - What feedback can be given that is substantive and actionable by students?
    - If EL students are struggling to respond because of the language demands, are there other ways that student can express their learning? For example, have students talk to a partner first, then write their responses. Or students can draw or diagram their answers and verbally explain their representation to the teacher or a peer.
    - What tools and strategies might be used if students do not meet success criteria?
    - How will feedback to students build upon their background knowledge and help them achieve the learning goals?

5. Include students in the formative assessment process by actively involving them in Peer and Self-Assessment.
    - Have students been given time and opportunities to learn how to engage in peer and self-assessment? For example, use of sentence frames to speak with peers in a peer conference, practice using self-assessment rubrics, or adaptations of rubrics that EL students can read and comprehend?
    - What types of pairings/groupings make sense for peer assessment?
        - When would it make sense for to pair with students with the same English proficiency levels? Different English proficiency levels?

Teacher Tips

When using formative assessment with EL students, it is important to design learning goals and success criteria that take into consideration both content acquisition and the role language

plays in those processes. Teachers must decide when a task assesses content, academic skills, language development, or a combination of the three. These decisions help teachers plan for moments in the lesson when it may be necessary to minimize irrelevant language and moments when it may be helpful or appropriate to use a rich linguistic context.

With regard to pedagogical actions based on evidence of student learning, teachers should distinguish between EL learners' linguistic and conceptual development in order to provide meaningful and focused feedback for students and take effective pedagogical action to support and scaffold student learning. Additionally, not only do teachers make pedagogical choices in the face of evidence during the lesson, but they also use the evidence they collected and their experience with the lesson for subsequent planning, teaching, and learning. Teachers ask, "Is further instruction in support of the same learning goal necessary?" and "Is student understanding secure, so that the next lesson should address the next learning goal?" Note that these questions may be answered differently for different students. In a sense, the learning of one lesson becomes the starting point of the next lesson; a clear picture of a progression of learning and student understanding through formative assessment is crucial to this continuity.

Final Note on Accuracy and Precision of Language Use

When observing students engaged in lesson activities, especially during collaboration and peer and small group discussions, teachers should focus on students' meaning-making processes—reasoning, comprehension, and communication of concepts and the connections between them—and not their use of imperfect language. Accuracy and precision in language are necessary in certain instances in a lesson (e.g., using correct vocabulary, final work products). However, in the process of learning, teachers may wish to encourage EL students to use language approximations in support of their content development. Teachers should take into consideration the moments when it may be helpful to accept imperfect language use and those when it may be helpful or appropriate to cue or model specific language features that require accuracy in a lesson.

PRINCIPLES IN ACTION: ANNOTATED EXAMPLE

The following classroom example illustrates the application of high-leverage principles described in this resource. The classroom lesson in the following vignette is designed for EL students.[26] The classroom teacher, Ms. Okonjo, has planned a lesson that focuses on supporting her EL students as they learn content and develop language. The lesson's learning goals and success criteria were:

- Compare and contrast two authors' point of view on schools' roles for punishing off-campus cyberbullying.
  - Determine the position each author takes on the issue.
  - Identify topics where authors agree, disagree, or are not similar.
  - Evaluate strength of arguments based on sound evidence.
- Orally present arguments in favor of one position.
  - State claim clearly.
  - Provide compelling facts, definitions, concrete details, or quotations.
  - Sequence ideas logically.
  - Use appropriate eye contact, adequate volume, and clear pronunciation.
- Write an argument to support a claim.
  - State claim clearly.
  - Include relevant evidence using facts, credible sources, or clear reasons.
  - Organize paragraph(s) using appropriate discourse connectors.
  - Use appropriate and precise academic and content-specific vocabulary.
  - Include concluding statement that summarizes your position.

In this annotated vignette, we have drawn attention to the ways that Ms. Okonjo:

- explicitly addresses word, sentence, and discourse academic language features throughout the lesson;
- structures opportunities to build upon students' background knowledge;
- designs multiple opportunities for students to engage in listening, speaking, reading, and writing;
- provides appropriate scaffolds to support students' content and language development;
- plans meaningful tasks where students engage in discourse;
- creates strategic collaborative grouping arrangements;

[26] California Department of Education. (2015). *Snapshot Collection of the English Language Arts/ English Language Development Framework for California Public Schools Kindergarten Through Grade Twelve*. Sacramento, CA: California Department of Education.

- gathers evidence of student learning, interprets the evidence, and responds pedagogically; and
- provides opportunities for self-reflection and peer assessment.

While these principles are addressed separately for the purposes of annotation, it is important to note that, in actuality, they are highly interrelated and integrated throughout the flow of a lesson. Effective instruction for EL students requires planning, using formative assessment, and strategically designing learning and language opportunities that incorporate elements of many—and at times, all—of these principles.

Developing and Defending an Argument in an Eight-Grade ELA/Literacy Classroom with EL Students

P2: Building upon students' prior content knowledge and funds of knowledge

P3: Structured opportunities for speaking and listening

P1: Addressing word- and sentence-level academic language demands

P3: Using integrated listening and speaking opportunities to scaffold academic language development

P1: Addressing word- and sentence-level academic language demands

P3: Students read a short article to identify unfamiliar terms and phrases. They use these terms to collectively develop and discuss student-created explanations

P1: Addressing word-, sentence-, and discourse-level (discourse connectors) academic language demands

At the beginning of class one day, Ms. Okonjo asks her students the following question, which she has also posted on the SMART board: *Should our democracy allow schools to punish students for off-campus cyberbullying?*

She has her students briefly discuss their initial reactions to the question in their table groups and explains that today they will read an article on cyberbullying that includes two arguments: one in favor and one against allowing schools to punish students for off-campus cyberbullying.

Ms. Okonjo writes three key words from the question: democracy, off-campus, and cyberbullying on the board and asks the students to discuss what they know about each of these terms and then jot down a list of words associated with each term. After asking a few students to report out on what their groups generated, she acknowledges students' understandings and tells them that they are going to learn more about the terms in an article they will read.

First, Ms. Okonjo asks the students to read the short article individually, circling any words or phrases they find are unclear. She also asks students to place a question mark next to longer passages that they need clarification about. After the first reading, she asks students to work together in table groups to help one another clarify the terms and ideas. Next, she guides the whole class in creating a list of unfamiliar terms with explanations for each, using an online collaborative document program (projected via the document camera). Students will be able to refer to this online word bank later and will also be able to collectively refine various terms' explanations over time.

Once they have discussed unfamiliar terms and phrases, the class collaboratively deconstructs a few complicated sentences selected by the students. For example, students analyze the first sentence:

"Although schools have a duty to protect the safety and well-being of their students, much of this *cyberbullying* takes place off-campus, outside of school hours."

Structure: Type of Clause? How I know?	Text Excerpt: Broken Into Clauses	Meaning: What It Means in My Own Words
Dependent, it starts with although, so it depends on the other part of the sentence	*Although* schools have a duty to protect the safety and well-being of their students	Schools are supposed to take care of their students. But . . . The word *although* lets us know that cyberbullying might still be happening.
Independent, even if I take the other part of the	much of this cyberbullying takes place off-campus,	Students use texting, Facebook, and other

Note: All student groupings were strategically created by Ms. Okonjo.

P1: Students are expected to perform the academic language functions of analyzing and comparing

P4: Students collaborate in groups and engage in discourse on topic

P2: Building upon and acknowledging students' understandings

P4: Students collaborate and learn from their peers

P3: Students learn and use annotation as a strategy and scaffold (circling words and creating list of unfamiliar words)

P4: Students work together in table groups as well as an online collaborative document program

P1: Addressing sentence-level academic language demands

P4: Working collaboratively to deconstruct complicated sentences

P3: Scaffolding by visually displaying students' thinking and discourse

sentence away it is still a complete sentence.	outside of school hours.	technology to bully others, but they do it afterschool. So, cyberbullying is still happening.

P1: Addressing language function of arguments and discourse-level academic language demands (i.e., constructing arguments)

P4: Strategic grouping to support students' content and language development and confidence constructing arguments

Ms. Okonjo then asks the students to go back into the text and to work in their table groups to identify the arguments for and against schools punishing students for off-campus cyberbullying. She tells them to take turns reading the paragraphs and to discuss whether they detect any arguments for or against whether the school should take action. She also tells them that they must come to a consensus on these statements. Once they have, each group member should write the same thing in his or her notetaking sheet. This, she reminds them, requires them to discuss their ideas extensively first so that they can be concise and precise when they record their ideas in their notes. Ms. Okonjo provides a notetaking guide for students to record their evidence.

P3: Opportunities for integrated reading, speaking, and listening

Should our democracy allow schools to punish students for off-campus cyberbullying?	
Reasons and Evidence For	Reasons and Evidence Against

P3: Notetaking as scaffold

P4: Teacher uses strategic grouping to gather evidence of content and language learning

As the students work in their groups, Ms. Okonjo circulates around the room so that she can listen in on the conversations, answer questions, provide *just-in-time* scaffolding, and more generally observe how the students are working together.

P5: Teacher gathers evidence to provide feedback and just-in-time scaffolding

P1: Students use language functions of reasoning and evidence to show that they understand the text and content of the lesson

P1: Supporting development of language functions

P3: Integrated reading, writing, listening, and speaking opportunities to further develop arguments

After giving students time to locate arguments for and against punishing students for off-campus cyberbullying, Ms. Okonjo refocuses the students on the deliberation question and explains that the students will be assigned to one of two teams: Team A, which will be in favor of the school exacting punishment, and Team B, which will be against such punishment. Each team will be responsible for selecting the most compelling reasons and evidence for its assigned position. Next, she provides time for the students to reread the article and identify the most compelling reasons to support the school taking action, along with powerful quotes to enhance these reasons. To ensure maximum participation, she asks every one on each team to prepare a presentation of at least one reason.

P4: Structures two teams to elicit discussion and debate

P2: Building on students' prior knowledge to select compelling reasons and evidence

P4: Strategic grouping to support and gather evidence of students' content learning and ability to construct arguments

P1 & P3: Using evidence from text to support and write arguments

As each member presents a compelling reason to his or her team, the other team members listen and record notes. Although the team members who are listening can ask questions if they do not understand, they cannot argue. Once all team members have shared amongst themselves, then each team presents its argument. To ensure understanding, the teams then switch roles, and defend the other team's most compelling reasons, adding at least one additional reason to support the other team's position. Then Ms. Okonjo asks students to move from their assigned team roles and deliberate as a group, using their notes. Afterwards, each student selects the position he or she now agrees with and, using evidence from the text for support, writes a brief paragraph to explain why. As the students discuss their paragraphs in small groups, Ms. Okonjo circulates around the room, checking students' paragraphs and providing support to

P5: Recording notes on other's presentation is a peer-assessment opportunity

P5: Providing just-in-time scaffolding

P5: Self-refection journals are a form of self-assessment. **P2:** Build upon students' personal experiences	those who need it. Following the class discussion, the students reflect on their oral contributions to group discussions in their journals. On another day, the students co-construct a letter to school board to express their varied opinions. To support their positions, they include the compelling reasons they identified, evidence from the text they read, and any relevant personal experiences.	**P3:** Write letters to schoolboard **P4:** Collaborate to co-construct letters

LITERATURE BASE FOR THE PRINCIPLES

Below is the literature base that informed each principle, organized by principle. The references marked with an asterisk (*) denote references that are free to access and download.

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