Lesson 3: Academic Discourse
Module 1: Structured Academic Discussion

Welcome to Accelerating Language Acquisition for Secondary English Language Learners, Lesson 3: Academic Discourse. This is Module 1: Structured Academic Discussion.

Throughout the lesson, we will guide you to particular pages in your workbook. You may access the workbook below the content window.

Section 1: Connect

In previous lessons, we introduced the idea that academic language is like a tree. In Lesson 2, we explored academic vocabulary, represented by the leaves. Here in Lesson 3, we will discuss academic discourse, represented by the trunk and branches. This lesson is further divided into two modules: one for oral (or spoken) discourse and one for written.

Discourse is connected language—phrases, sentences, and paragraphs. So academic discourse is this connected language used in academic settings—discussions, lectures, and written texts—in science, social studies, math, and language arts classrooms.

Academic discourse varies among subjects, and content teachers are in the best position to help students learn it. The goal is for students to be able to talk and write like mathematicians or scientists, literary scholars or historians, when learning the core subjects: math, science, English language arts and reading, and social studies.

In Lesson 3, Module 1, you will learn to structure speaking activities that enhance the quality of content instruction with academic language and help students construct oral responses using academic English.

You will also learn to analyze the language needed to respond to an academic discussion task and, specifically, to create sentence frames and response banks that support students at various proficiency levels.

To understand the importance of intentional instruction in academic discourse, let’s watch as this former English-language learner reflects on her experiences with academic discourse in secondary school.

RUWAN: Lots of times I knew the words for some of the things we were talking about in class, but I didn’t know how to put them together. For example, in science, I knew the names for things we used in the lab and even for some of the science ideas, like evaporation or particulates, but I didn’t know how to say anything about those things. I didn’t know how to connect the words. I could just point and name things, which made me feel dumb. I knew the answers, just like the other kids. But I just couldn’t express it.
This student’s experience is not unique. His background experiences and native language knowledge are assets to be built upon in the classroom. Every English language learner (or ELL) can learn how to connect the words—to ask questions, to test out his or her understanding of the concepts, and to ultimately show that he or she knows it too, “just like the other kids.”

Section 2: Get Information

For students to learn how to express academic concepts in connected discourse, they need explicit teaching and structured practice in both oral and written academic language.

Take a moment to read about the benefits of academic discourse in the classroom.

Remember our former ELL, who knew “what the other kids knew” in science but couldn’t express it in English? With instruction and practice in academic discourse, he might have been able to do more than just “name things.” For example, he could have:

- Described the stages of the cell cycle;
- Explained how the contributions of people of various racial, ethnic, gender, and religious groups shape American culture; or
- Predicted the effects of changing slope and y-intercept in applied situations

TEKS expectations that require students to use academic language can be found across all subject areas. These three examples come directly from TEKS expectations in biology, U.S. history, and algebra.

Notice how all three call for communication through language: describe, explain, predict. These active verbs requiring oral or written communication we call expressive verbs.

Here is a list of some of the most common expressive verbs in the secondary-level TEKS, across all subject areas. Take a quick look at a few of these. How do they call for communication through language? Might that language be oral, written, or both? As you’re about to see, many TEKS expectations include expressive verbs. Let’s look for examples in your subject area.

In just a moment, we’ll ask you to search an excerpt of the TEKS for instances of expressive verbs.

First, you’ll look for the active verb in each expectation. Decide whether it’s a verb or verb phrase that calls for a student to use oral or written language. If it is, click the word. If you’re correct, you’re one step closer to your goal. For reference, we’ll provide you with a list of the most commonly occurring expressive verbs in the TEKS.

Ready?

Section 3: Apply, Part 1
No matter the subject area, academic discourse is inherent in what’s expected of your students. That’s why it’s essential to plan activities that provide opportunities for students to practice academic discourse as they deepen their content understanding.

In a moment, we’ll observe Ms. Davis’s classroom. Her mentor, Ms. Clark, will also be observing.

As you watch, use the “Classroom Observation: Speaking Task” page in your workbook to jot down notes about the language you hear Ms. Davis’s students using. Would you label their interaction as academic discourse?

MS. DAVIS: All right, students—so, we’ve been talking about the organelles of plant and animal cells. You’ve been working on charts with the functions of each organelle. Now, I want you to work with your partners. Using your charts, pick an organelle and tell your partner what it does. Be able to talk about how the organelles are alike and different. I’ll be walking around the classroom listening for good discussions.

CARLOS: This is a plant cell. It has the green things.
LELA: Yeah, for food.
SOFIA: These have the same stuff.
JAMES: Yeah, same stuff.
LELA: But it also has the wall thing that goes around it.
CARLOS: The animal one doesn’t have that.
CELESTE: Look, they both have this big, round thing in the middle.
MIGUEL: And this one, too—it says, “mitochondria.”
CELESTE: Those do the power, right?

MS. DAVIS: All right, everyone—let’s wrap up your discussions. It’s time to share some of your answers with the whole class.

Next, let’s join Ms. Davis as she observes Ms. Clark teaching the same lesson in her class.

Again, take notes about the language you hear her students using. Would you label these interactions as academic discourse?

MS. CLARK: We’ve been learning about the organelles of plant and animal cells. You should have completed charts on the functions of each organelle. Can you show me your charts?

Great. You also have created models with different objects to represent the cells. Who made plant cells? Show me the plant cells.
And animal cells? Show me those.

Now, we are going to practice talking about the organelles of plant and animal cells, using academic language and complete sentences. Here is how a scientist might describe an organelle: “I have a plant cell. One of its organelles is the cell wall. Its function is to protect and provide support for the cell.”

Now, students, to help you describe the organelles, we will use sentence frames, like we have before.

Let’s complete one together. “I have a …” and here you name whether it’s a plant or animal cell. Which should we do?

STUDENT: Animal.

MS. CLARK: OK, so I fill in “an animal” in the blank. I need an because animal begins with a vowel.

Let’s continue. “One of its organelles is the …” and here you name the organelle. Which organelle should we describe first?

STUDENT: How about the cell membrane?

MS. CLARK: Sure. So, I fill in “cell membrane” there. “Its function is to…” this blank reminds us to use the correct verb. Remember the ones we acted out? So, look at your charts and find the function of the cell membrane. Etta?

ETTA: Is to regulate what can pass freely into the cell.

MS. CLARK: Great, Etta. Now our sentence is complete. Who wants to read the sentence?

STUDENT: I have an animal cell. One of its organelles is the cell membrane. Its function is to regulate what can pass freely into the cell.

MS. CLARK: Great. This is what you will do in your groups. Use the sentence frames to help. Also, don’t forget to listen to what your partners have to say—saying things like “Another organelle in the animal cell is the mitochondria.” It allows you to connect with your partner and show that you know the difference between the plant and animal cells. Make sense?

STUDENTS: Yes.

MS. CLARK: Who can tell us what we need to do?

STUDENT: We need to go around in our group and talk about the organelles and what they do.

STUDENT: And we have to tell if it is a plant or animal cell.
STUDENT: In a complete sentence.

MS. CLARK: That’s right. Let us begin.

STUDENT: I have a plant cell. One of its organelles is the chloroplast. Its function is to convert sunlight and water into sugar.

STUDENT: I have an animal cell. It doesn’t have chloroplasts. An organelle in the animal cell is the mitochondrion. Its function is to generate energy for the cell.

STUDENT: Another organelle that both plant and animal cells have is the nucleus. Its function is to store the genetic material of the cell.

STUDENT: I have an animal cell. One organelle in the animal cell is the cell membrane. The function of the cell membrane is to regulate what enters the cell.

MS. CLARK: I’ve been listening to your discussions and hearing you speak as scientists do. Nice work. Time to share a few answers with the whole class.

Let’s see whether you noticed any of these examples in your observations. The students in Ms. Davis’s class said things like:

• “It has the green things … yeah, for food.”
• “And they both have this big, round thing in the middle.”
• “Those are to do the power, right?”

The students are on target as far as content but are not talking like scientists. Instead, they are using everyday language to discuss the topic. Let’s compare that with Ms. Clark’s class. Her students said:

• “Its function is to convert sunlight into sugar.”
• “An organelle that both plant and animal cells have is the nucleus.”
• “The mitochondria generate energy for the cell.”

You probably noticed that the students in Ms. Clark’s class used academic language more frequently, by using academic vocabulary, such as organelle and nucleus, as well as Tier II words like convert and generate. They often spoke in complete sentences and used formal constructions, such as “Its function is to…” and “An organelle that both plant and animal cell have is…”. This is what we mean when we say academic discourse.

How did Ms. Clark structure the activity to support students’ use of academic discourse? Let’s listen in as the two teachers discuss their observations.

MS. CLARK: Of course, the first thing is to have solid content instruction. What do you think were
some of the strong points?

MS. DAVIS: I planned for students to have opportunities to see a video, explore what the cells look like, and work collaboratively.

MS. CLARK: Yes. And you had students make their own models and label them. That all helps the students engage with the content and could provide props for discussion.

MS. DAVIS: I saw that in your classroom. How do you make that come to life?

MS. CLARK: First, I always ask myself, “What do I want students to be able to say about this concept?”

MS. DAVIS: OK, so in this lesson, it would be the function of the organelles.

MS. CLARK: Right. The standard asks students to differentiate, and our objective breaks this down into two tasks: to compare the two kinds of cells and to describe the organelles.

MS. DAVIS: OK, so they will get that info from the video, textbook, and activities?

MS. CLARK: Yes. But I also wanted to design an activity that would ask them to articulate that information themselves. You had an activity for your students, too, but they didn’t use the key terms or talk in complete sentences while doing it.

MS. DAVIS: And some didn’t talk at all.

MS. CLARK: Because they didn’t have to. But I set the expectation for them to speak to one another in a very formal way. That was part of the assignment.

MS. DAVIS: I guess that’s what was missing in my class. I need to set up the speaking task, just like any other assignment.

MS. CLARK: Right. Set up the task for talking about what they are learning. That is the first step, anyway.

So when Ms. Clark is preparing for her lessons, she starts thinking about academic language by asking this question: What do I want students to be able to say about this concept?

To answer that question, she first looks at her content objectives and state standards and then creates a task or question that will get students talking or writing about what they are learning.

MS. DAVIS: I noticed most of the students following that frame you modeled at the board.

MS. CLARK: That’s right. Providing a model is key, which leads me to the next important question. Here I ask myself, “What would a correct student response sound like?” I have the task for the students, but I need to figure out what the answer is. What would it actually sound like, for the students to answer correctly?
MS. DAVIS: So, basically, what words they would use.

MS. CLARK: Yes. I write out what I want students to say.

MS. DAVIS: You literally write it out?

MS. CLARK: Yes. I write it out myself ahead of time, before class. I have tried improvising on the spot, but it doesn’t work out so well. Even though you know the science, it is very hard to think about the academic language in the middle of an activity.

MS. DAVIS: So, are you looking at both content and language?

MS. CLARK: My sample response will help me model both what they need to know about science and how to express that in academic English. I use the objective and the standard as the starting point.

MS. DAVIS: Can you explain that?

MS. CLARK: Like here—we saw that students would need to differentiate between plant and animal cells. And they do that by comparing the types of cells and describing the cell structures and their functions.

MS. DAVIS: Oh, I see. So, the sample response illustrates what that sounds like—what language to use to describe the functions in academic English.

MS. CLARK: Yes. When I know what I am looking for from them, I can focus on how to help them get there.

MS. DAVIS: And I guess that’s true for content and language.

MS. CLARK: You’ve got it.

The second question Ms. Clark asks herself is: What would a correct student response sound like?

She takes the time to write it out herself, in complete sentences, using the kind of academic English that students would be expected to use in the field and in higher learning.

MS. DAVIS: The sentence frames seemed to work great for the students. Do you use them often?

MS. CLARK: Yes. I use them all the time, which addresses the third question: “What language support do students need to produce the response?”

MS. DAVIS: I guess I would have thought about how to have students answer without using language, to help my ELLs.
MS. CLARK: I know that instinct, but if you teach ELLs the language, they can do it. And they need to.

MS. DAVIS: That makes total sense, and the sentence frames seem to be a great tool for achieving this. Can you show me how you make them?

MS. CLARK: Sure. I use my sample response to analyze the grammatical structure and to make it into a sentence frame for them. So, here is the sample response that I wrote out.

MS. CLARK: Next, I identify the parts of the response that will vary in the activity.

MS. CLARK: Next, I take those parts out and leave a blank.

MS. CLARK: I then label the blanks with clues to the information that belongs there.

MS. DAVIS: This looks like a fill-in-the-blank activity.

MS. CLARK: Well, it is different in an important way: It is not an assessment of what they know. It is a guide to make sure students have the language support they need to discuss the cell structures, using academic vocabulary.

MS. DAVIS: I noticed that you gave the students another sentence frame for that activity. Can you explain that?

MS. CLARK: Yes. So, these frames show how students can respond in two cases, when their cell does and does not have the cell structure mentioned by the last speaker.

MS. CLARK: Many fluent English speakers can speak like this without help. But many ELLs, especially beginners and intermediate speakers, would not be able to participate fully without it.

MS. DAVIS: Oh, I see.

MS. CLARK: Even for my advanced students, a sentence frame reminds them to use academic English.

MS. DAVIS: I can’t wait to use this activity to get my students talking this way.

So once she has written out her sample response, the third question Ms. Clark asks herself is: What language support do students need to produce the response?

To answer this, she analyzes the vocabulary as well as the surrounding grammatical structure of the sentence. She considers the proficiency level of her English learners and creates sentence frames that will provide support for all her students in creating a high-quality response.

We have seen how Ms. Clark uses sentence frames to provide the shell for student responses in academic English. She also supports her ELL students by providing response banks for filling in the
missing pieces. She has found that this extra level is very useful for her beginning and intermediate English speakers.

Response banks can include key Tier III vocabulary terms as well as Tier II words and phrases that will be used to express the concepts in the context of the lesson. And as with the sentence frames, it will be important to model an example of how to use the response bank items in context.

Ms. Clark emphasizes that response banks and sentence frames are not fill-in-the-blank assessment activities—the quiz will come later. Instead, the sentence frames and response banks help keep students on track and focused on the key information. She finds it is worth time practicing with the right terms and phrases while they are learning the concepts.

Students will use both sentence frames and response banks to varying degrees, according to proficiency level and comfort with the content. Ms. Clark encourages her more advanced students to go beyond these supports, but by using them, she knows that all her students have the language they need to learn and participate.

To review, here are the three guide questions Ms. Clark uses when planning any lesson or activity.

- What do I want students to be able to say about this concept?
- What would a correct student response sound or look like?
- What language support do students need to produce the response?

For your convenience, we’ve provided these planning guide questions in your workbook.

These questions can also be used to adapt lessons and activities you already use in your classroom. Ms. Davis has a review activity that she’d like to adapt for academic discourse. Let’s listen in.

MS. DAVIS: I have a small-group activity: a game I use to review vocabulary before a quiz. With the help of sentence frames and response banks, I think my students will be better equipped to review the material, using complete sentences.

MS. CLARK: What’s the game?

MS. DAVIS: It’s kind of like 20 Questions. One student has a secret word that the others in the group try to guess, using yes/no questions. The secret word is a vocabulary word I’ve put on a card. For example, we’ve been studying organelles, so for this version, each card has the name of an organelle.

MS. CLARK: And the others in the group ask yes/no questions to try to guess it?

MS. DAVIS: Yes. They ask the questions based on the information they have on their organelle charts. Depending on the group size, the students usually guess a word within three turns each. Then the next student picks another card, and they play again.
MS. CLARK: That’s great. The game provides them with a purpose in reviewing the chart.

MS. DAVIS: Yes. But I also want them to sound like scientists, so I want them to ask and answer the questions in complete sentences.

MS. CLARK: I think this is great.

Ms. Davis’s game can be tailored to any subject area and topic. For this particular lesson, she calls the game “Name That Organelle.” Ms. Davis thought it would be the perfect candidate for adapting because it’s a small-group review activity that highlights academic vocabulary.

Let’s help Ms. Davis plan support for this activity.

**Section 4: Apply, Part 2**

We’re going to use the three planning guide questions to help adapt Name That Organelle for academic discourse.

Let’s start with question 1: What do I want students to be able to say about this concept?

The two things Ms. Davis wants students to be able to say about organelles are:

• The type of cell in which the organelle is found, either plant cell, animal cell, or both; and

• The function of the organelle in the cell, or what each organelle does

Note that both of these are featured on the worksheet that students completed earlier in the lesson. You’ll find that worksheet and its answer key in your workbook. This is the worksheet the questioners will use when guessing the secret word.

The next step is to consider what a correct student response would sound or look like.

MS. DAVIS: Student responses in this game will be both questions and answers. Should I write out both?

MS. CLARK: In this case, yes. But the questions come first, so let’s start with that. Remember, aim high. What do you want their questions to sound like?

MS. DAVIS: First, they should be complete sentences. But also, a lot of times, the tests they take use phrases like “would it be likely” or “would you expect.” They find that confusing.

MS. CLARK: So let’s include those phrases in the model questions, so the students can learn what they mean and not get confused on the test.

Use the Student Worksheet Answer Key to help Ms. Davis figure out some correct student responses for the activity. Remember, in Name That Organelle, the correct student response is a yes/no
question.

So, for example, looking at the chart, Ms. Davis might notice:

MS. DAVIS: Certain organelles can be found in plant cells, animal cells, or both. So one yes or no question a student might ask is, “Would it be likely to find this organelle in a plant cell?”

Take a few moments to type up five more questions that students might ask in this activity. Include, as Ms. Davis specified earlier, one using the phrases “would it be likely” or “would you expect.”

Click Ready when you’re done.

Here are a few of the questions Ms. Davis came up with.

The last step is to figure out what language support students will need. Ms. Davis has already decided to create sentence frames and response banks like the ones Ms. Clark uses in her classroom. This process will allow her to analyze the vocabulary, the grammar, and sentence structure her students of differing English proficiency levels will need to practice in order to produce the correct responses.

So let’s help her create the sentence frames.

First, underline the content that will become a blank in the frame. Ms. Davis will do the first one.

Click Ready when you’re done.

This is what Ms. Davis underlined.

To simplify our work, let’s delete frames that will be identical.

Now those underlined phrases will become blanks.

And Ms. Davis will label the blanks with clues, such as topics, parts of speech, or other helpful phrases. She’s done the first one. Fill in the rest with your best answers. For reference, the original questions are listed above. Click Ready when you’re done.

Here are Ms. Davis’s answers and reasoning.

MS. DAVIS: This first blank was looking for a type of cell, so I provided the clue: type of cell.

This next question was a variation of the first, so again, I provided the clue: type of cell.

The third question asked for the function of the organelle. Here, the students will need to provide a verb along with the correct phrase to tell what the organelle does.

And the fourth question was about the name of the organelle, so that’s what I’ve labeled this blank.
Ms. Davis will now use the labels of her sentence frames as topics of the response bank she supplies for her students. Here are the three topics Ms. Davis created when making sentence frames. She’ll use the worksheet to find the terms and phrases that students might use to fill in the blanks.

For example, here are her answers for “Types of Cells.” Use the Student Worksheet Answer Key to find some terms and phrases you would include in Ms. Davis’s response bank. Click Ready when you’re done.

Here are some of Ms. Davis’s responses.

Remember, students will use both the sentence frames and response banks to varying degrees, according to proficiency level and comfort with the content. Over time, students will learn many ways to explain and ask questions about content. Ms. Clark has encouraged Ms. Davis to use these frames and encourage her students to expand on them as they become more proficient in academic English. Using academic English—and having the support needed to do so—is what will help her English learners be successful in learning the content as they grow toward the next level of proficiency in English.

We’ve created supports for the questioners. Now we can do the same for the responder. The student holding the secret word card may need prompts in answering the other students’ questions. For this student, Ms. Davis creates a template of answers that encourages the student to respond in complete sentences.

The first sample answers appear here. Pick one of the other questions and answer it, using the template Ms. Davis has started.

Click Ready when you’re done.

This is the language that Ms. Davis is going to expect from her students. When she models it beforehand and provides support during the activity, this is the type of complete sentence answer she will use.

For her fluent and advanced English speakers, this example and modeling may be sufficient. For her intermediate and beginner students who are less familiar with yes/no question-and-response constructions in English, Ms. Davis can use the same process we just went through to develop similar sentence frames for yes/no responses. She knows that all her students are capable of working through the content—learning about the organelles and their functions—as long as she provides the language support for them at their level of proficiency.

Section 4: Process

Now that you’ve worked along with Ms. Davis to prepare the activity, you can see how this will provide students with additional practice using academic discourse while at the same time improving their understanding of the lesson content.

As Module 1 of Lesson 3 concludes, let’s once again visit Ms. Clark and Ms. Davis as they reflect on
the value of this kind of planning.

MS. CLARK: I definitely think teaching academic language is worth it. My students need to be prepared to read and discuss science at a high level not just in their classes next year, but also in college and in the workplace. Not every student will choose to be a scientist, but it is my job to make that option available to them. Academic language is the language of opportunity.

MS. DAVIS: In addition, it has helped them learn the science content.

MS. CLARK: That’s true. When students talk about it and write about it, the information becomes theirs. And now they can tell me what they have learned. That sounds pretty simple, but it makes all the difference for me as a teacher and for them as students.

MS. DAVIS: I couldn’t agree more.

In this module, you have seen how Ms. Clark uses the three guide questions to structure speaking activities in her lessons. You have worked with Ms. Davis to analyze the language her students will need in the adapted review activity and to create the supports needed to help her students participate in the discussion, at various levels of English proficiency.

When this module ends, take a moment to think about your own class. You may use the “Lesson 3 Module 1 Synthesis” page in your workbook to note your idea about these questions:

- How can you structure speaking activities in your classroom?

- How will you help students at different proficiency levels participate in these academic discussions?

You’ve reached the end of Lesson 3, Module 1.

In the next module, we will see how to support academic writing skills in the content classroom and how oral and written discourse support one another.