Structuring the Talk: Ensuring Academic Conversations Matter

NANCY FREY and DOUGLAS FISHER

Abstract: This article focuses on structures that should be in place to engage students in academic discussions. The authors focus on establishing purpose, using language frames, and productive group work. The authors provide multiple examples of students engaged in structured conversations that ensure they practice both content and language.

Keywords: academic English, discussion, group work, English learners, sentence frames

While there is ample research on the importance of talk in the classroom, the reality is that students do not engage in academic conversations without guidance. A simple command to “turn to your partner” is just as likely to result in an exchange about social matters as it is to be focused on making a prediction about the main character in the book being discussed or summarizing the process used to solve a linear equation. The rich and meaningful talk teachers hope for may or may not transpire in the hum of a busy classroom. Faced with the possibility that classroom control will devolve into chaos, some teachers limit opportunities for interactions between students in order to keep the lesson moving.

Yet most of these teachers also recognize the trade-off they are making when they sacrifice oral literacy development for the sake of classroom management. Middle and high school students are uniquely positioned to engage in sustained interactions and to work with one another for developmental reasons. Students at this age have attained a level of understanding about the abilities of their peers and are similarly learning about their own abilities (Harter 1999). Much of this learning about one’s identity occurs in the company of others, a critical consideration because there is a decline in self-concept after the age of 12 (Baldwin and Hoffmann 2002). A study of small-group interactions of secondary school students found that both self-efficacy and group motivation grew as the students experienced a series of tasks, leading the researchers to suggest that an increase in opportunities for interdependent group tasks is especially vital for this age group (Klassen and Krawchuk 2009). That is not to say that these ideas do not work in elementary schools—they do. It is to suggest that middle and high schools can be places in which academic language is developed and used.

However, promotion of meaningful partner and group interactions requires that the tasks and their accompanying talk be structured so that academic language use is maximized. In particular, these structures include clearly establishing content and language purposes, using language frames to scaffold discussion, and creating opportunities for productive group work.

Establish Purpose

Establishing purpose is essential for learning because it provides an initial framework on which to build understanding (Fisher and Frey 2009). Having a language purpose, in particular, has proven to be especially helpful for students who are English-language learners (Hill and Flynn 2006). Teachers have met with great success by focusing explicit attention on establishing content, language, and social goals at the beginning of the lesson (Fisher, Frey, and Rothenberg 2008). These three goals provide a valuable dimension to help students shape their academic talk. In a science class, for example, the teacher might establish the following goals:

• Determine the role of organelles in cellular life (content).
• Use the technical terms nucleus, cytosol, Golgi bodies, lysosome, peroxisome, and mitochondria to...
summarize the role of organelles in animal cells (language).
• Practice active listening strategies as group members explain their thinking (social).

In an English class, the teacher can start a lesson like this:

Today we’re going to look at the ways poets use alliteration to cause a reader to visualize [content purpose]. You and your learning partners will locate and discuss examples of alliteration and assonance in several poems. You’ll use technical terms to explain your examples to your group, including alliteration, assonance, literary device, and verse [language purpose]. Since each person in your group will be analyzing and explaining a different poem, you’ll need to work together to listen and take good notes to complete the assignment [social purpose].

Content purpose alerts students to the topic of the day’s lesson. This is different from the content standards, which are worded in broad language and usually require many experiences threaded throughout the year. The content purpose, on the other hand, is focused specifically on the subject of the day’s activities. It is important to note that a specific content purpose need not result in mastery in a single session, but it should be stated in such a way that it is doable. Consider the English example. In broad standards language, the wording would say something about “explaining the effects of common literary devices in a variety of fictional and nonfiction texts” (California Department of Education 2007, 156). In contrast, the teacher’s content purpose is about the use of two literary devices by poets for the purposes of visualizing. While students will need multiple exposures to this technique, the statement adequately describes what will occur in this lesson.

Language and social purpose further delineate the expectations regarding talk in the classroom. The teacher’s language purpose includes the specific academic vocabulary that students will need to use in their discussion. These words are posted on the board so that the students can see as well as hear them. In the science example, the teacher’s purpose included the technical vocabulary to be used in the oral summary. The teacher understands that if she is to expect these terms to be used in the students’ writing, they must first use them verbally and in context. As writing researcher James Britton (1983, 11) noted, “Writing floats on a sea of talk” and these small acts of oral composition are essential prerequisites for more formal academic writing. As well, the English teacher’s social purpose (“work together and listen”) reminds students that the collaborative nature of their work depends on their willingness to draw together to complete the task.

Taken together, these three dimensions of purpose shape the conversation that occurs when students are working together. When students were ready to work together, the teacher repeated the purposes and reminded them of the terminology they would need to utilize in their discussion. In addition, she restated that they would need to listen to one another in order to complete the assignment that required them to analyze four poems (Brooks 1960).

Janelle: OK, it’s my turn. I have the poem called “We Real Cool” by Gwendolyn Brooks.

Luis: Wait, spell it. [Janelle spells Gwendolyn while the others write.]

Janelle: So this poem is assonance. I mean, it has assonance in it. [She reads the eight-line poem to her group.]

Chloe: That’s vowel sounds, right?

Janelle: Yeah, but it doesn’t have to start with the letter.

Chloe: It’s the syllable that’s stressed. It might be inside the word.

Erik: Show us what you wrote on the poem.

Janelle: I read it out loud to myself, but quiet, so I could hear it. Listen to this verse: “We real cool. We left school.” And then there’s this verse: “We jazz June. We die soon.”

Erik: So is it always rhymes?

Janelle: I don’t know if it’s always, but in this poem it is.

Luis: So assonance is when the poet uses the same vowel sounds together. But what did you visualize?

Janelle: Well, the poem title is longer than what I said. It’s really “We Real Cool. The Pool Players. Seven at the Golden Shovel.” That /oo/ sound is in “pool” just like cool and school. And I pictured those older guys in my neighborhood that hang out all day and don’t have a job. My mom says they’re too cool for school but really they’re losers.

Luis: Like that old movie with the gangs that are snappin’ their fingers. [Laughter]

Erik: Hey, wait! It’s in songs, right? Like what rappers do. [Begins to rap by repeating a line from a popular song]

The students in this example utilized the content, language, and social purposes established by their teacher to drive their conversation. While they had a good time, the task was matched to the purposes the teacher established, and it was clear to the students what they needed to accomplish in the allotted time.

Use Language Frames

Although establishing content, language, and social purposes are important to set expectations for academic talk, students also benefit from support in order to have academic conversations. In particular, English-language learners may struggle with using academic vocabulary in syntactically correct sentences. Students who have
difficulty with the content may also have trouble using terms that are conceptually accurate. And nearly all middle and high school students are still learning the rhetorical writing structures associated with formal academic composition. Language frames can scaffold academic talk through the purposeful use of rhetorical structures. Language frames are sentences in which some of the words are given and students insert other words to share their ideas.

Language frames encourage students to use academic vocabulary. For example, a social studies teacher regularly uses the published debates featured in USA Today to foster conversation and discussion. In one lesson, students read one of two editorials on school discipline: the newspaper’s position that zero-tolerance policies should be eased, or the opposing view of an education leader who argued that schools need to err on the side of safety. The teacher provided students with the following language frame to support their conversations:

According to this article, a zero-tolerance policy is (necessary/unnecessary) because ______. First, the author states that ______. In addition, the author argues that ______. I agree with the author’s claim that ______. However, I disagree with the claim that ______. In my opinion, ______. What’s your opinion?

After posting the language frame on the board, the teacher distributed the readings and invited students to read and highlight notable sections. Students then met with three other classmates who had read the same editorial to discuss the claims and evidence forwarded by the author. After annotating the article, they met with another student who had read the opposing-view editorial. At this point, students drew on the language frame supplied by the teacher to guide their conversations. First one partner, and then the other, shared the major points made by the writer and weighed in with their opinions. Once these partner conversations had taken place, the teacher invited the students back as a whole class and led debate on the pros and cons advanced by the authors. After lively discussion on the merits of each argument, students once again used a language frame to support their position. In addition, a new language frame required them to acknowledge counterclaims:

In my opinion, a zero-tolerance policy is (necessary/unnecessary) because ______. First, the author states that ______. In addition, some argue that ______. I agree with the author’s claim that ______. It is important to acknowledge that some will argue that ______. While this argument has some merit, it is not as strong because ______. In summary, I believe a zero-tolerance policy is (necessary/unnecessary) because ______.

The use of a language frame (sometimes called a template) is common in the teaching of rhetorical writing (Graff and Birkenstein 2006). The ability to write for argumentation and persuasion is particularly challenging for adolescents who often prefer to adopt one position and simply ignore counterclaims, which are vital in persuasion. Therefore, the use of the second language frame allowed them to apply what they had discussed in their conversations with classmates. Importantly, this process allows students first to compose orally before they do so in writing. This approach combines several research- and oracy-based writing strategies—fostering inquiry, engaging in collaborative learning, and using models—that are recommended for improving writing achievement for adolescents (Graham and Perin 2007).

Language frames are not limited to use in English and social studies classrooms. Students in an algebra class practiced the following frames with their teacher and were encouraged to use them in their group discussions while problem solving.

- My answer is ______ because ______.
- Another way to solve this problem would be ______.
- The solid figure is a ______ because it has ______ vertices, ______ edges and ______ faces.
- My answer is ______. This answer is reasonable because ______.
- In order to solve this problem, I need to know ______.
- I agree with ______ however ______.
- If ______ then ______.
- Why did you choose that operation? (clarification) I chose that operation because ______. (justifying your solution)
- Another way to solve this problem is ______.
- I used ______ (strategy) to solve ______ (equation) because ______ (rationale).
- My answer is correct because I checked my work by ______.

Scientific writing has its own set of demands that are separate from the type of writing used in the humanities. While the use of adjectives and adverbs may be valued in science classes, they are viewed as clouding the prose of a scientific paper. Instead, brevity and clarity are the norm. Schulte (2003), a biologist who studies communication among elephants, likens this type of writing to the scientific method. Scientific writing requires an introduction of background information, followed by the objectives of the paper. Next, the method is provided and the results explained. The paper concludes with a discussion of the findings and their implications for future research. Oral language frames organized by each section of the scientific paper can assist students in engaging in the scientific discourse necessary for later documentation in their writing.
Introduction

- In order to understand ____, we need to explain ______ first.
- _______ is directly related to ____ because ________.
- While some have argued that ________, others have stated ________.

Objectives

- The purpose of this study was to ______, using a test of ______.
- The hypothesis of the researcher was ________.

Method

- The subjects included ______.
- The test chosen to prove the hypothesis was ______ because ________.
- The data were collected by ______ and analyzed using ________.

Results

- The purpose of this study was to ______.
- The data were analyzed using ______ as a statistical means to reduce bias.
- The results of the experiment were ________.

Discussion

- The findings were significant because ______.
- The hypothesis that ________ would result in ________ was (proven/disproven) because ________.
- A limitation of this experiment is ________. It could be further strengthened by ________.
- A future line of research in ______ could result in ________.
- In order for this to occur, it would be necessary to ________.

When developing a lab report based on work with their lab partners, the biology teacher displayed each of these sentence frames on the data projector as the class worked through each section. “Remember to use these in your discussion with your partners, because they’re going to help you get to the ‘meat’ of your reports,” the teacher told the students. When two students used the language frames used for the discussion section, they realized they did not initially know what a limitation was. With the help of their teacher, they ruled out their initial response concerning availability of materials, and realized that a primary means of strengthening the experiment would be to replicate it. What started as conversation soon translated into the academic written discourse of a formal lab report.

Productive Group Work

Extended academic talk opportunities allow students to apply their conceptual knowledge to deepen understanding. However, while whole-class discussions give some students the opportunity to participate, they rarely involve everyone. Often, only a small portion of the students actually participate, leaving others to merely witness the thinking of others. Kelly’s (2007) study of middle school English classrooms found that just four students answered 74 percent of the questions asked by the teacher during classroom discussion. If students are to fully benefit from the academic talk of the classroom, they must engage in it. This is often best accomplished through productive group work structures that allow students extensive responsive opportunities in the company of a small group of peers (Frey, Fisher, and Everlove 2009).

Ideally, productive group work consists of from two to five students working together on a task that requires them to rely on one another to complete it. A good way to judge whether the task meets this objective is to watch the way students decide to approach it. If you see the group dividing the task into segments and then making plans to meet later to assemble it, then you know it missed the mark. A common mistake, one most teachers have experienced, is assigning a group presentation only to watch in dismay as students simply decide who would write each PowerPoint slide and then go their separate ways, never meeting again until the day of the speech. Instead, teachers can require that each member of the group be the lead presenter on a slide that differs from the one they made. Group members then learn that they need to teach one another the content if they are going to successfully complete the assignment.

The task complexity must be taken into account as well. This can be tricky, because even heterogeneous groups differ from one another. In order to increase academic talk, the task should be novel and not a replication of what the teacher has modeled; it should hold the possibility of productive failure. This is not to say that the task should be so difficult that there is little possibility of success. Rather, the task should be complex enough that the first attempt may not be successful so that group members need to engage in discussion about the content and their strategy for the next attempt. Evidence shows that failed attempts at a complex problem result in higher levels of achievement because students attend to error analysis more closely (Kapur 2008).

For example, a humanities class examined the narratives of formerly enslaved people from the American South. The teacher prepared large index cards featuring different narratives for each group, allowing her to differentiate experiences across the class. To prepare students for the task, she established purpose by explaining,
Each group is going to read a moving account [of] the memories of an enslaved person. These recorded memories will give us a different perspective on the living conditions in the years leading up to the Civil War [content purpose]. As you read the narrative to yourself, I want you to visualize an image. Draw that image and then discuss it with your group [language purpose]. Listen to what your group mates have to say, because you’re going to come to consensus about which image is the most powerful [social purpose]. Your group will create a collaborative poster that includes your powerful words and images.

The teacher then explained the procedural details to her students, and reminded her students that they would need to use the words injustice, legal, property, overseer, and narrative in their conversation. During the following 30 minutes, students read and discussed their assigned narrative and selected powerful words and phrases. In addition, they debated the images they had drawn and chose one for their collaborative poster. One group read a chilling narrative about the author’s grandmother’s beating at the hands of the overseer. The woman was gravely injured and suffered a deep, open wound in her skull. One student, Yadira, read a portion of the text to her group mates: “‘They had to put a slavery half-dollar to hold her brains in.’ That’s the phrase that really stood out for me. The person said that sometimes his grandmother would let him feel that half-dollar in her head. I drew an image of someone’s fingers in the hair trying to feel that coin.”

“Why did you pick that image?” asked David, another group member.

“Because when I read that I realized I was doing the same thing to my head. Trying to feel for a bump like that,” Yadira quickly answered. “That grandmother wasn’t a person to the overseer. She was property, and that was it.”

After creating their poster and sharing their results with the rest of the class, the teacher introduced a language frame for them to use to debrief the process:

My role in the group was _____. I was most proud of _____.
One skill I need to improve is ______. I learned that ______.

As students discussed their learning in this productive group-work task, the teacher listened in on several conversations and noted the extent to which she heard evidence of content learning and metacognitive thinking.

In an earth science class, students studying the causes and effects of earthquakes saw their curriculum dramatically come to life when a 7.0 earthquake struck Haiti in January 2010. The teacher organized groups of students to provide daily updates for the class on the developing story. Each group had a focus for the week: one reported on earthquake data from the U.S. Geological Survey, another on changes occurring on Wikipedia as facts emerged. A third group updated the class each day about humanitarian efforts, and a fourth group provided the class with current information on the condition of the infrastructure around Port-au-Prince. Because information was changing so rapidly, the groups met at the beginning of each class for 20 minutes to gather and synthesize information. The teacher met with each group to assist them in this endeavor, sharing information with groups when they were stuck and pointing them to sources of current and credible information.

“I really saw a change in them as the week wore on,” the teacher later remarked. “They got good at locating and sharing information with other groups, not just their own.” He went on to explain how the Wikipedia group, who was monitoring the discussion section of the entry, found a map of major earthquakes in the Caribbean since 1690 and alerted the U.S. Geological Survey group of it. “They [the U.S. Geological Survey group] jumped on it right away and used it the same day to illustrate how much tectonic activity had occurred in the region,” the teacher said. “But what I was most impressed with was that they could recognize the usefulness of it, even though it wasn’t their assignment. That’s authentic learning—you know useful information when you see it. They wouldn’t have known it was useful if there hadn’t been the daily sharing of updates across groups. It’s the talk that made the difference.”

Conclusion

When students talk, they think. As we have been told more than once by a student, “I didn’t know what I thought until I said it out loud.” Talking provides students with practice with the language and an opportunity to clarify their understanding in the presence of their peers. As students talk, teachers gain a greater understanding of students’ mastery of the subject matter. But talk does not just happen. Teachers have to establish purposes for the classroom talk, provide scaffolds such that the talk remains academic in nature, and allow students opportunities to talk. When these structures are in place, classroom talk becomes a regular feature of the learning environment.

REFERENCES


