

Academic Conversations

Classroom Talk That Fosters Critical Thinking and Content Understandings

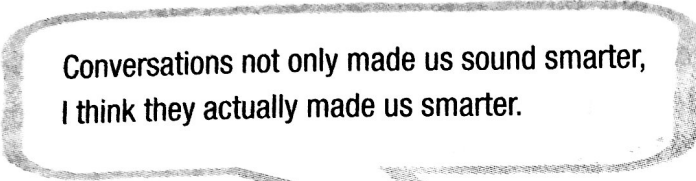
Can you elaborate on that? I think it means... What does that mean? More specifically, it is... Can you clarify the part about...? It is important because... Tell me more about... Let me see if I heard you right... How is that important? In the text it said that... Can you be more specific? What do you think? An example of that is... Is that clear? One case that illustrates this is... What is the main point we want to communicate after discussing this? It sounds like you think that... What is our conclusion? Let's get back to the idea of... How can we summarize what we discussed? That makes me think... Where does it say that? It boils down to... What are examples from other texts? Do you agree? I would add that... How can we add to this idea of...?

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Chapter 1

Reasons to Converse in School



Conversations not only made us sound smarter,
I think they actually made us smarter.

—Fourth-grade student

Most likely, you are already convinced of the value of using conversations to teach. But, just in case someone does ask why your classroom is so loud, here we provide some convincing reasons to offer in response. This chapter begins with a brief description of the need for more and better oral academic language in school, followed by advantages of classroom talk that we have grouped into five categories: language and literacy, thinking skills, content learning, social advantages, and psychological advantages.

The Need for Oral Academic Language

One possible reason for the lack of oral language development in school is the popular “Trivial Pursuit” view of learning (Perkins 1992), in which knowledge and intelligence are seen as an accumulation of routines and facts (we also refer to this as “game-show pedagogy”). Most high-stakes tests reflect this view, which in turn shapes curricula and classroom teaching practices. Yet, these days the facts are readily available on the Internet, they can change overnight, and they can be learned quickly. These days it is what you *do* with the knowledge that counts. Beyond just finding and memorizing the facts, an educated and productive person in today’s world must be able to evaluate the facts and then *use* them for meaningful problem solving. Future workers need to know how to use a variety of critical thinking skills to build complex ideas and solve problems *with others*.

Despite their power, rich conversations in school are rare.

Oral language is a cornerstone on which we build our literacy and learning throughout life. Unfortunately, oral language is rarely taught in depth after third grade. Lessons dominated by teacher talk tend to be the norm in many classrooms (Corden 2001; Nystrand 1996). Of particular concern is oral academic language. Students from middle- and upper-class backgrounds tend

to develop many academic aspects of English at home. When they arrive at school, they need to make only slight changes to their language to learn and show learning.

Sadly, academic talk is most scarce where it is most needed—in classrooms with high numbers of linguistically and culturally diverse students. These students (to whom we will refer as “diverse students” throughout this book) tend to speak nonmainstream versions of English and come from low-income backgrounds. Often, because of test-score pressures, diverse students are placed in classes that emphasize quiet practice of isolated skills and facts. Several studies have shown that teachers tend to give students from low-income backgrounds fewer opportunities to talk about content and engage in critical-thinking activities than teachers of higher-socioeconomic students (Cotton 1989; Lingard, Hayes, and Mills 2003; Weber et al. 2008). In one study, Arreaga-Mayer and Perdomo-Rivera (1996) found that ELLs spent only 4 percent of the school day engaged in school talk and 2 percent of the school day discussing focal content of the lesson. Nystrand et al. (2003) also found almost no effective dialogue in low-track eighth- and ninth-grade classes. These and other studies reflect the need for increased chances to talk and develop oral academic language in classrooms with diverse students.

Interaction Without Depth

In many classrooms, talking activities are used in limited ways, often just to check learning of facts and procedures rather than to teach or deepen understandings. We have seen many cases in which the following popular activities offered large amounts of interaction and language exchange (i.e., the room was loud) but did not take students to deeper levels of thinking and negotiation of meaning. Academic conversation work seeks to deepen and fortify these practices.

- » *Think-pair-shares.* On many checklists for effective and engaging lessons, think-pair-shares tend to consist of quick, surface-level answers and only one turn apiece by partners. Think-pair-shares (a.k.a. turn-and-talks) are more useful for quickly answering questions and to break up a long activity such as a teacher lecture. They usually lack depth and, when given more time, the chats quickly lose focus because students lack skills to stay on topic or extend it.
- » *Small groups.* We have seen many small groups in which students never negotiate meaning, never build on one another's ideas, just fill in charts, share their own answers to questions, allow one student to dominate and do all the work, and work alone next to one another.
- » *Answering with memorized sentence stems and frames.* Many classrooms have lists of language frames or sentence starters on the wall for students to use to answer questions. These are helpful in getting students started—that is, when the students understand what the frame means—but frames can be awkward during a conversation when students keep looking up at the wall or down at their notes to read them.

Electronic Communication and Computer Programs

Another need is created by current uses of certain electronic communication devices and computer programs. Even though we see the value of technology for learning and working, we are concerned by the lack of face-to-face communication that results from the use of such devices. Text-messaging, handheld games, online social networks, computer games, e-mail, and even cell phones have the ability to limit in-depth communication with other people. Granted, information is often exchanged, but exploration of a topic, the building of ideas, and emotional connections are often missing. As Putnam (2000) argues, we are experiencing a significant loss of social capital. This loss is characterized by a decline in the number of organizations, meetings, family dinners, and visits with friends. Face-to-face time is declining in schools, yet many professional folks beyond the walls of school, including employers, desire workers and colleagues with excellent oral communication skills. Moreover, popular modes of communication, such as video, podcasts, written texts, music, and images are mostly "one-way." They do not adjust their messages or negotiate meanings with their viewers, nor do such modes encourage students to think as much as a real partner in conversation can.

Developing Knowledge and Skills for the Future

Similar to the Trivial Pursuit/game-show approach is the brick-hauling model of teaching. Teaching is not meant to be like loading up a truck (a student's mind) with a large pile of bricks (facts) to dump out into a pile somewhere (standardized tests). Bricks are meant for building. True, they are necessary materials, but for them to be useful a builder must skillfully put them together over time to build something. In the same way, students must have academic knowledge available in their minds for thinking and conversation purposes. That is, students need things to think and talk about! Students should learn, for example, key events and people of the American Revolutionary War, geological forces, literary devices, and so on. At the same time, students must learn how to combine the facts and procedures, working with others to create products and solutions that are too complex to be tested with multiple-choice questions. In this way they will develop deep knowledge and expertise in a subject area. Facts become raw materials for building ideas, solving problems, thinking critically and creatively, communicating, and transferring concepts to novel situations. Conversation, as this book describes, can play a large role in developing these higher-level skills.

What are the academic skills that should be reinforced and emphasized? Many are on (but do not stand out on) state and federal lists of standards by grade level and subject area. Take a look at a typical standards list and highlight the verbs that ask students to do something. You might

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see terms such as *evaluate*, *distinguish*, *outline*, *summarize*, *analyze*, and *hypothesize*. Most of these are actually thinking skills that are often best developed in conversation. Moreover, some of these skills *need* to be developed in conversation, and if we remove this avenue, we weaken students' chances for academic success.

Another helpful place to look for the core skills that students need to learn is lists of the skills that employers desire and foresee desiring in the future. The skills and qualities in Figure 1.1 are a synthesis of several such lists. Some items on the list, for example, come from Tony Wagner's (2008) extensive interviews of organizations that intend to compete in an increasingly globalized world. Wagner, like many others, argues that many curricula, assessments, and teaching methods need to be drastically overhauled to develop students' high-leverage skills for the coming decades.

Take a look at Figure 1.1 and reflect on how evident these skills and qualities are in most classrooms' instruction. How often are they assessed in school? If we don't assess them or emphasize them, and then expect them in later years of school and work, what happens?

Figure 1.1 Skills and Qualities Desired by Employers

Skills	Qualities
<ul style="list-style-type: none"> • Communicate effectively (#1 skill on most lists) (e.g., clearly listen, speak, and write complex and abstract concepts). • Ask insightful and critical questions. • Collaborate well with others (work in a team; lead and be led). • Solve problems logically, systematically, and creatively (define, plan, follow a plan, reflect, and improve over time). • Conduct logical, thorough research, and critically evaluate evidence. • Analyze, synthesize, prioritize, and organize ideas. • Weigh the relevance and importance of ideas. • Recognize bias. • See multiple perspectives on an issue and empathize. • Apply and generalize concepts to new domains. • Use technologies and visual literacy to learn, communicate, act, and produce. 	<ul style="list-style-type: none"> • Strong work ethic • Initiative • Flexibility/adaptability • Honesty • Professionalism • Loyalty/trustworthiness • Enthusiasm/encouraging of others • Willingness to learn • Emotional intelligence • Curiosity/interest • Cross-cultural understanding • Leadership

Adapted from Casner-Lotto and Barrington 2006; Hansen and Hansen 2009; National Association of Colleges and Employers 2007; Wagner 2008.

Even beyond these working-world skills and qualities, what else do students need for a successful life, to make the world a better place, to raise a family, to improve their communities, and to make positive changes in the world? What qualities do we want our own children to have? Some lists would probably include curiosity, concern for others, patience, altruism, and empathy. And, if these are important, we must ask if we are developing these in our curricula, assessments, lessons, and school environments.

Academic conversations can help to develop the highly important but under-tested skills and qualities just mentioned. Teachers can shape conversation prompts and mini-lessons to teach these skills throughout the year. One teacher even used these qualities as topics of student conversations. Students talked about what it meant to be loyal, honest, diligent, mature, motivated, and so on. As you read through this book and plan lessons, consider how to keep the development of these skills and qualities a high priority in student conversations. After all, our duty as teachers is to prepare, to our utmost abilities, each student for a successful life—no matter how misguided and disjointed the educational system is.

Academic conversations also align with the national Common Core State Standards that have been adopted by the majority of states in the United States. Students will be expected to collaborate in teams, express their ideas, and listen to one another as they communicate with purpose. They will be required to think critically together and express their thoughts in coherent ways for a variety of different applications. Here is a sample excerpt from the Common Core State Standards Web site:

Speaking and Listening: Flexible Communication and Collaboration

Including but not limited to skills necessary for formal presentations, the Speaking and Listening standards require students to develop a range of broadly useful oral communication and interpersonal skills. Students must learn to work together, express and listen carefully to ideas, integrate information from oral, visual, quantitative, and media sources, evaluate what they hear, use media and visual displays strategically to help achieve communicative purposes, and adapt speech to context and task. (Common Core State Standards Initiative 2010)

This and similar standards demonstrate the growing importance of teaching communication and conversation skills in school. The next section describes in more detail the advantages of using conversations to teach critical thinking and content, while at the same time building conversation skills.

Advantages of Conversation

Conversations offer a variety of advantages in different dimensions of academic and personal development, as described in the sections that follow. We have coded the advantages into different

categories: language and literacy (LL), cognitive (COG), content learning (CON), social and cultural (SC), and psychological (PSY).

Conversation Builds Academic Language (LL)

People, especially children, internalize and develop language when they are immersed in it and when they use it for real purposes. Three processes are vital: listening, talking, and negotiating meaning (Krashen 1985; Swain 1995; Long 1981). Negotiating meaning means using nonverbal and verbal strategies to express, interpret, expand, and refine ideas and their variations in meaning in a conversation (Hernandez 2003). These three processes also apply to academic language, which is the set of words, grammar, and organizational strategies used to describe complex ideas, higher-order thinking processes, and abstract concepts most often encountered in academic and professional settings. Academic language tends to be used in lectures, textbooks, presentations, and workplace meetings.

Conversation fosters all three language learning processes (listening, talking, and negotiating meaning). Conversation allows students to practice the academic language they are absorbing and using from sources such as the teacher, texts, media, and peers. In a whole class, or even in a small group, students can lose focus. But in pairs, because students are engaged with one other person, they are more likely to listen and take in more challenging structures and words to make sense of them. They are also more likely to express their ideas with the more challenging language. Finally, in many conversations there is a healthy amount of repetition of ideas, which offers students a chance to say something again—better and clearer than the first or second time it was said. In a history classroom, for example, two students might have very different understandings of freedom and, as they negotiate its meaning with different partners, they will push themselves to use more precise examples and more advanced language each turn.

Conversation Builds Vocabulary (LL)

Being exposed to new words is important, but using them in authentic discourse is vital for lasting learning. When teachers with whom we worked compared the words used in conversation to those learned just for quizzes, they found that using new words in authentic conversation increased students' long-term learning of them. Through its use in authentic conversation and writing, a word becomes a familiar tool used to build ideas rather than just another term to memorize.. Conversations offer practice in using these meaning "tools" to construct and express a wide variety of ideas (Nystrand 1996).

Bakhtin (1986) argued that we learn words not from dictionaries but from other people; and the words carry with them the accumulated meanings of their previous users. It is vital for students to use new words in slightly new ways, transferring and tweaking and processing word

meanings—stretching language to fit new situations. The process of making words fit new ideas makes the words stick in the brain, figuratively speaking. For example, the other day a student in a high school science class asked the teacher how to say “esta evidencia pesa más que la otra” (this evidence weighs more than the other) in the middle of a conversation with a partner.

This advantage should encourage us to create conversation tasks and experiences in which students *need* and want to use new words. See Chapters 4 and 6 for ideas on how to do this.

Conversation Builds Literacy Skills (LL)

Conversation builds oral language, which is a foundation for reading and writing (Roskos, Tabors, and Lenhart 2009). Conversation helps readers develop vocabulary, syntax, background knowledge, and thinking skills that authors of texts expect readers to have. It also helps students practice reading strategies such as predicting, questioning, summarizing, clarifying, connecting, and interpreting (Ketch 2005). For example, a student reading a history textbook can stop and talk to a partner about what she predicts the effects of the war will be, or her connections between war in the nineteenth century and war today. We have also seen conversations help students organize their thoughts, identify evidence in the text to support their opinions, and strengthen vocabulary and syntax needed for academic writing.

The language that happens in each person’s head is the main set of tools for constructing meaning from texts and for writing. Conversations are opportunities to practice using such tools. As students talk about ideas from texts, they test their ideas and compare them to peers’ ideas about the same text. Some points are confirmed while others are changed or discarded. In conversations, questions and inferences about the text are often explored and answered, and, as a result, comprehension of the text improves. An eighth grader remarked, “I never understood the book, so I never read it. But after talking to my partner about the chapter on atoms and stuff, I understood it finally. I even tried to read the next chapter on my own. But then I had to talk about it, too.”

Conversation Builds Oral Language and Communication Skills (LL)

The development of oral language tends not to be emphasized in school. It is even less emphasized after third grade. Teachers have long lists of standards, assessments, and curricula based mostly on knowing, reading, and writing. Oral language is expected to serve other purposes. Yet the abilities to listen, express, and build meaning with others form a cornerstone for learning, one that must continue to be fortified every year, or the ever-expanding high-rise of learning that the foundation supports will fall down. After grade three, many nonmainstream English-speaking students are not immersed at home in language that aligns with the academic language of school. Their oral language growth depends mostly on oral language experiences in school, many of which are not

focused on building oral language. Academic conversations intentionally immerse students in the oral building of ideas and the language that is needed to shape and support those ideas.

Many vital communication skills are not automatic in all students. Skills that adults might take for granted can be "hidden" until we make them visible and teach them to children. We realize that communication skills vary widely across cultures and groups. The skills typically valued in many mainstream academic and professional settings might be less often modeled in culturally and linguistically nonmainstream homes. For this reason, we must (a) realize and respect the differences, and (b) make extra efforts to teach the skills that students will need for higher education and work. Such skills include leaning toward your partner when conversing; making eye contact; using gestures and facial expressions to show understanding or puzzlement; and turn taking. These and other skills evolve through practice. All students can benefit from practicing conversation skills and carry these skills forward not only to support their immediate communication skills development but to also assist them in their adult lives.

The following list briefly describes several additional communication skills and values that conversations can foster.

Argumentation Skills. Many students do not see models of appropriate argumentation and persuasion skills at home, on the playground, or on TV. Classroom lessons offer a chance to observe and practice argumentation skills. Students learn how to compare what they are hearing from their partner with what they themselves are thinking and how to formulate their next response. They learn how to respectfully challenge others' ideas and respond to challenges to their own ideas. They practice coming to an agreement (or agreeing to disagree) and synthesizing their ideas.

Group Discussion Skills. Conversations tend to foster more student ownership of group and whole-class discussions. Students learn to talk to each other, not just through the teacher in an initiation-response-evaluation (IRE) format that is common in many lessons.

Listening. Conversation improves students' abilities to listen to academic messages. When they listen to one partner and are expected to respond and co-construct ideas, their listening skills sharpen. They learn to interpret intonations, facial expressions, silences, and other clues in a variety of different people.

Valuing talk and clarity. In conversations, students learn to value the process of talking with another person about deep and serious issues. They learn that talk is a powerful way to connect with others, to value them, and to understand the world. They learn that it is important to strive for clarity and that it takes negotiation of meaning to achieve it.

Conversation Builds Critical Thinking Skills (COG)

Critical thinking skills allow us to understand and overcome the many challenges and problems that we face. We want students to learn new thinking skills and develop existing ones to serve them in more challenging situations. As for those many facts that need to be learned, it is thinking about them and communicating them that helps them to be learned in lasting ways.

Oral interaction is one of the main avenues for developing critical thinking skills (Reznitskaya, Anderson, and Kuo 2007). These are the skills that tend to be used by experts in every discipline to build, shape, and challenge new and valued ideas. As Mercer (1995) describes it, “One of the opportunities school can offer pupils is the chance to involve other people in their thoughts—to use conversations to develop their own thoughts” (4).

There are many different lists of critical and creative thinking skills, including the famous taxonomy of Benjamin Bloom and colleagues (1956). Several skills that we have found to help students engage in academic tasks are recognizing and solving problems, inferring and predicting, gathering relevant information, interpreting themes and motives, evaluating evidence, comparing, seeing multiple perspectives, recognizing bias and ethical issues, applying ideas and skills to novel situations, and analyzing patterns and relationships. These skills and strategies to develop them are described throughout the following chapters.

Conversations tend to be much more complex than we realize. Ybarra et al. explain: “For example, a simple exchange of views between two people requires that they pay attention to each other, maintain in memory the topic of the conversation and respective contributions, adapt to each other’s perspective, infer each other’s beliefs and desires, assess the situational constraints acting on them at the time, and inhibit irrelevant or inappropriate behavior” (2008, 249). In each academic conversation a student must engage various habits of mind, quickly and in real time, often in response to what a partner says. Unlike writing or passive listening, conversation requires the skill of quickly processing and responding—without being able to push a button to forever delete a weak point or to move text around.

Conversations allow students to closely examine, scrutinize, criticize, validate, and shape the ideas being discussed. Such skills are vital in a democratic society. They allow students to own their ideas. If students are taught only to be consumers of information whose sole purpose in school is to raise their test scores, then they are less likely to be successful in high-level courses and jobs in the future.

Academic conversations develop students’ intellectual agility (Brookfield and Preskill 2005). They learn to think in real time, to think on their feet. In conversation, students must be able to quickly process and respond to unanticipated comments, some of which might be very strong counterarguments. In conversations, students must continually compare their ideas to the ideas of others. And when students say their ideas out loud, they are open for critique and for development. This real-time cognitive agility is vital for future success.

Conversation Promotes Different Perspectives and Empathy (COG)

There is great value in getting to know other people's perspectives. This seems obvious, but it is not happening in many classrooms. Test-focused teaching in school and a texting-gaming-watching-TV culture outside of school tend to lower the chances for students to share and learn perspectives at more personal levels. In school, perspectives are often limited to those of the teacher and the textbook. Conversations encourage students to get to know each other and expose them to a range of opinions, ideas, and worldviews. A student can and should learn from every other classmate's opinions, experiences, and ways of thinking. And when students understand each other at deeper levels, many of their conflicts become smaller and fewer.

Talking with others allows their ideas to influence our ideas. All of our important ideas are unfinished. Throughout our entire lives we continue to shape our thoughts and theories through experience, reflection, and interaction with others. Each evolving big idea about life is packed with our biases, purposes, values, and past experiences. We have our own ways of organizing, categorizing, supporting, and using each idea. For example, in third grade you might have learned that animals adapt over time. In the years and decades that followed, you might have transferred the idea of adaptation into other areas, such as literature. Now, you might notice how characters adapt, or how literature adapts to its historical events and language. But your current conversation partner might have a different notion of adaptation. She adds examples from her life to your idea. When conversing about migration in a history class, she mentions how she adapted her personality when her family moved to a different state. She sees adaptation from a personal point of view, one that you haven't considered. Together, however, you expand the meaning of human adaptation. In conversation, partners transfer and expand their understandings of a concept as they explore one another's ideas.

Just telling two students to share their perspectives isn't enough for productive conversation. A partner must be interested, or at least show interest. The partner needs to respect the other person and value perspectives that might seem very different. In other words, I need to care about what you think and I need to believe that it is as valuable as what I think. To do this well, I need to listen. I need to step into your past and present shoes to consider what you feel. I need to empathize. When this happens, I see where your ideas are coming from, and vice versa, and we find common ground to share.

Finally, I can benefit greatly by learning others' views, but conversations (and all of school) should be about more than what *I* can get out of it. Conversations can help to counterbalance the "Look out for number one! Me first!" mentality that prevails in humans. Conversations can provide practice for students in thinking about what the partner needs, wants, values, and feels. In the long run, this is the kind of "skill" needed for solving the many social and political problems that students will face in the future.

Conversation Fosters Creativity (COG)

Creativity is often needed to solve problems or communicate a complex message, yet it has largely been squeezed out of most curricula these days. Creative writing decreases around fourth grade, and art and drama classes have given way to courses that are supposed to foster better test scores. We do not argue the obvious need for teaching and encouraging creativity in schools here, but we do argue that conversations can contribute to creativity in several ways.

First of all, conversations provide help in defining the problem or challenge. A partner's different perspective can also help with the brainstorming stage of the creative process, in which possible solutions are generated. A conversation can also be very helpful in the discernment stage, in which solutions are evaluated and decided. A partner can help another student see the flaws in one idea or the merits in another. For instance, in a sixth-grade science classroom, pairs were conversing about the pitfalls of different ways to prevent earthquake damage. Some ideas were too costly, while others did not take different types of earthquakes into account.

Conversations can even be designed with the stages of creativity in mind: define the issue; do needed research; brainstorm possible solutions—no matter how zany; discern which solution is most likely to work; and test and implement it (or communicate recommendations).

Conversation Fosters Skills for Negotiating Meaning and Focusing on a Topic (COG)

A key skill for learning and expanding one's language is negotiating differing meanings. Negotiating meaning, explained in more detail in Chapter 5, happens when two or more people adapt their differing ideas of a topic to come to a more shared understanding. Negotiation gets us on the same page, or at least on a page in between the two extremes. In classroom conversations, two important negotiation strategies that students develop are comprehension checking and paraphrasing. Comprehension checks are little phrases and words in our messages, such as *Right? Got it? Is that clear?* and *Understand?* These openings in the conversation allow a listener to question meanings of terms and concepts during the message. A listener can then paraphrase to confirm comprehension, using phrases like these: *So what you mean is . . .*, *In other words . . .*, *I think I get it. It's when . . .*, and *Are you saying that . . .?*

Staying focused seems to be getting more difficult by the day, given the myriad messages that are competing for students' attention, such as text messages, Web pages, e-mails, movies, advertisements, and so on. Textbooks and classroom activities seem to get less and less interesting and more challenging because they require extended focus. Conversations can help students build their focusing stamina. In addition to teacher modeling and guidance, students can use graphic organizers, students in the role of observers, and self-monitoring to maintain focus on a

topic. For example, conversations helped one fourth-grade student who said, "Before doing this conversation stuff, I would listen to a partner and be thinking about lunch."

Conversation Builds Content Understandings (CON)

Students can learn and reinforce core content concepts from both talking and listening in conversations. The act of verbally sculpting and struggling with a big idea helps it stick in the mind. Over time, as students sculpt ideas with their evolving skills with academic language and growing vocabularies, their content understanding increases. But they need many chances to practice and many exposures to different students at different language proficiency levels. As Mercer writes, "Information can be accumulated, but knowledge and understanding are only generated by working with information, selecting from it, organizing it, arguing for its relevance" (1995, 67).

Conversation helps students to refine and enrich their knowledge (Alvermann, Dillon, and O'Brien 1987). Hearing another's ideas or perspective on an issue challenges each student to take a closer look at his or her own ideas and perspectives. When two or more people converse, their ideas mix and interact to create new knowledge. Talkers walk away from the conversation with much more than they could have thought up on their own. Like flowers that rely on bees to pollinate them, we need the ideas of others for our minds to thrive. Calkins writes that "talk, like reading and writing, is a major motor—I could even say *the* major motor—of intellectual development" (2000, 226). The more students expend mental energy to clarify and verbalize their emerging ideas, the more language and thinking they use in the process. They are doing more than regurgitating information or selecting answers for points. They are taking ownership of ideas. They are using additional parts of the brain to sculpt and resculpt the ideas for and with a real audience. These processes foster learning that endures.

In conversations, students often become teachers of one another. A student will teach a partner what he or she is thinking. The process of teaching, as teachers know, forces a person to focus, to dedicate lots of mental energy to the concept, to understand it on multiple levels, to clarify it, and to learn it through and through. A ninth-grade math student told us, "I didn't know how to solve equations well enough to teach it, but then when we worked together to come up with a mini-lesson, we got good at it. I think the teacher should have paid us."

Conversation Cultivates Connections (CON)

Much of what we are teaching our students in school and how we are teaching it, especially to our linguistically diverse students, is too disconnected. Because of intense pressures to raise test scores, many schools inundate students with isolated practice activities and imitation test items on a myriad of facts and grammar rules. However, learning needs to be meaningful, coherent, deep, and connected.

Conversations help students connect thoughts to build ideas that are much bigger and more relevant than snippets of knowledge needed for most tests. In the metaphorical story about two stonecutters who are asked what they are doing, one answers, "I am cutting this stone into a perfectly square block," and the other answers, "I am building a cathedral." The second worker uses each day to build something significant. We argue that we should want students to take both perspectives and then add a third: to be the designers of the cathedral. Students can and should be part of real content-area issues and solution building. This can happen as schools design more assessments and curricula that encourage creativity and connections to the world.

Although we might think that conversations last just a few minutes, they often last weeks, months, or even years. A single conversation is often a short slice that forms part of a "long conversation" that builds on previous meanings (Mercer 1995). This may seem a bit abstract, but most teachers have learned much from these long-lasting conversations in which ideas have built up over time. Our teaching and curricula need to keep long conversations in mind. If we don't, the winds of a busy life easily scatter the many standards being learned by students.

Conversation Helps Students to Co-construct Understandings (CON)

Understanding comes from working with ideas, not just regurgitating facts and answers. Conversations allow students to work with new facts and words to build their own theories, opinions, and mental models. Ideas last longer when they are products of shared mental labor. When students shape knowledge, they are more likely to own it. If you paint a picture, for example, you remember the details and its meaning much better than if you were told to memorize the scene from someone else's painting. When construction workers build a house, they learn to use the tools very skillfully and in a variety of settings. Similarly, students learn from working with knowledge to construct ideas. The ideas come to life, reminding us of Alfred North Whitehead's comment, "We must beware of inert ideas, i.e., ideas that are merely received into the mind without being utilized or tested, or thrown into fresh combinations . . . Education with inert ideas is not only useless: it is above all things, harmful" (1929, 38).

Conversations allow for the building of a rich foundation of communal backgrounds and shared experiences. In individualized learning, each student has only his or her own background to build from. But with lots of conversation, a classroom has a wide range of experiences and connections upon which to build new learning.

Conversation Helps Teachers and Students Assess Learning (CON)

Conversations allow students to show what they know and can do. Through conversations, students can see what they have learned and still need to learn. Teachers can observe students working in pairs or have conversations with students to see what they have learned or need to

learn. For example, a seventh-grade language arts teacher, upon observing students converse about themes in *The Giver* (Lowry 2006), realized that students were missing several key themes and evidence from the book. She also noticed that they were strong in building on each other's ideas, but weak in synthesizing points at the end. (See Chapter 10 for more ideas on assessing with conversations.)

Conversation Builds Relationships (SC)

When students are provided the opportunity to converse with other students with whom they might not normally interact socially, walls come down and new relationships can be forged. Students begin to find their commonalities while at the same time they learn to appreciate their different perspectives. The experience of getting to know another student's thoughts and views can provide an entry point into new friendships and a way to clear away obstacles to a positive relationship.

A powerful relational aspect of conversation is caring. When someone takes the time to listen to us, use our ideas, say things like, "Great idea," "I like that," "Tell me more," and so on, we feel good. This is advantageous in two ways: (1) conversation gives practice in caring about another person's ideas and thoughts—an immensely vital yet untested skill in life; and (2) when a partner cares, it makes the recipient feel valued and cared for.

Almasi et al. (2004), studying 412 K–3 students, found that the peer discussion treatment group developed fewer socially isolated students and fewer social stars. We also found this leveling of social status in our own research with fourth and eighth graders (Zwiers and Crawford 2009). Several fourth-grade students mentioned to us that they became friends with other students after just a few paired conversations. Some students said that they had had few friends before the conversation work started, even after years of being in the same classes. One student said, "I made friends with kids I never thought I would even talk to, or want to talk to."

Conversation Builds Academic Ambience (SC)

It is a wonderful experience to hear students excitedly discussing the content of their core curriculum and making connections to their own lives and experiences. Once students are encouraged to converse about the content of their lessons, their entire school experience becomes more connected and integrated, including their social interactions on the playground and those in the classroom. When students are encouraged to make and discuss connections, they begin to do this naturally, and school becomes a place of continual learning, not simply segmented time devoted to individual subject areas. One student even said, "I think about things a lot more when I know I am gonna talk about it with another student."

Conversation Makes Lessons More Culturally Relevant (SC)

Culture has a powerful influence on shaping language, learning, and thinking in society. Many diverse students come from backgrounds in which they learn through lots of interaction. As Mercer and Littleton state, "A sociocultural perspective raises the possibility that educational success and failure may be explained by the quality of the educational dialogue, rather than simply by considering the capability of individual students or the skill of their teachers" (2007, 4). We agree, but such thinking contradicts many current "direct instruction" and test-score-raising practices. A cultural lens encourages us all to place a much higher priority on understanding how students think, learn, and communicate in order to develop academic skills and content. It forces us to think about the whole person and about how to strategically teach for students' long-term academic, social, and emotional gains.

A key cultural issue that arises is the variety of conversations that can and should happen. Each culture, community, and home might use conversations in different ways. One person's idea of a conversation, academic or otherwise, might differ significantly from that of another person. Diverse students might hear a wide range of academic conversations in their homes that take different paths and use different moves than what are expected at school. As Shirley Brice Heath, in her seminal study of language learning in homes and schools of differing communities, found, "There is a deep continuity between patterns of socialization and language learning in the home culture and what goes on at school" (1983, 56). When these continuities don't exist, students often struggle. For example, at home a child might not hear extensive use of examples to support ideas but at school might be expected to use examples to support ideas.

Conversation Fosters Equity (SC)

Equity means providing underserved students extra experiences, resources, knowledge, skills, and language so they may gain equal access to future educational and professional opportunities. It means acceleration. Many diverse students come from homes and communities with language and communication styles that are very different from those of mainstream schools. Mainstream students might have thousands more stories read to them and many more conversations about the stories. These conversations will tend to use more school-like terms and features. Conversations in school can increase students' exposure to the language and thinking of texts.

Language, whether used by a pair of students in the classroom or at international peace summits, is a powerful tool. People use language to influence others, establish dominance, and defend their beliefs and rights. We want our students to have and use the tools of language to even the playing fields—to share their ideas, defend their opinions, and change the many unjust cycles that are perpetuated by current policies and practices. If we neglect to cultivate students' language

skills, positive change will not happen. Cummins explains, "For example, it has been argued by many theorists that the vision of our future society implied by the dominant transmission models of pedagogy is a society of compliant consumers who passively accept rather than critically analyze the forces that impinge on their lives" (1994, 47). It seems that many current teaching approaches, especially in classrooms with high percentages of diverse students, promote dependence on authority, passive involvement, and short-term learning. Academic conversations can counteract these effects by empowering students to be more independent in voicing and shaping ideas.

Conversation Develops Inner Dialogue and Self-Talk (PSY)

Some of the most important "conversations" that we can have don't involve other people. We often have conversations with ourselves. We talk to ourselves silently about a wide range of mundane and deep topics. Classroom interactions can have a positive influence on our students' inner conversations over time. Just as it is important to say thoughts out loud and to organize them into logical sentences, it is important to get students into the habit of coherent thinking. This means that we must engage students enough so that they walk away conversing with themselves. Just as what we hear from others shapes us, the many things that we say to ourselves sculpt us over time.

As Routman points out, "All learning involves conversation. The ongoing dialogue, internal and external, that occurs as we read write, listen, compose, observe, refine, interpret, and analyze is how we learn" (2000, xxxvi). The external dialogue (conversation with others) cultivates the internal dialogue (thinking).

Conversations with others shape "inside-your-head" conversations. Vygostky (1986) highlighted the importance of inner speech and the fact that children have powerful inner dialogues. If you spend much time learning a new language in another country, you notice that after a while the new language starts popping up in your head at odd times. It is being absorbed, and the brain begins to use the language to make sense of all that is happening. This is less obvious with our first language, but this still happens. Our brains grab on to the language around us and use it to make sense of the day's thoughts and feelings. We dialogue with ourselves as language forms a stream of thoughts all day and even at night. You are likely having a dialogue with yourself about this text right now. You might be asking questions, or even having an inner dialogue on whether you hold inner dialogues or not.

Knowing this, we can be strategic about the language and ideas that shape students' minds. We can provide learning experiences that students mull over well after class. We can improve students' inner dialogues in order to cultivate their thinking skills and conceptual understandings. We can provide them with and immerse them in academic language that they can use for their inner dialogues. Two powerful ways to build these inner dialogue abilities and self-talk are listening to conversations and holding conversations. The back-and-forth negotiation of

meaning in conversations provides loads of rich language in which students can be immersed and engaged.

School experiences, classroom conversations, and teacher language have a profound impact on the thinking of students. Students often begin to hear the teacher's voice inside their heads. Recently, during a conversation with a teacher about this topic, a student walked in and the teacher asked her, "When you read, do you ever hear my words in your head?" She replied, "Oh yeah, big time. When I stop reading I start asking questions like you do. You know, why did the author write this, and how this connects to my life. It's creepy, but I think it helps." Over the years, we want students to develop helpful inner conversations and thinking habits of generating multiple ideas, questioning them, and evaluating them. And we have to be ever-reflective and watchful of what we say.

Conversation Fosters Engagement and Motivation (PSY)

Many students like to gossip and chitchat; they like to be social and engage with others. Even though it is a bit more work to have an academic conversation, much of the social motivation is already there. One day we asked three sixth-grade girls who were very engaged in conversation what they were talking about. They said, "The book we were talking about in class." We thought they were kidding. "Really, we were debating if we thought it was right for him to stay in the house or leave." We asked, "Wow, why are you still talking about it?" One girl said, "We didn't have enough time in class to finish, and this type of talking is fun, almost as much as gossip." Getting them to practice academic talking and thinking outside of class like this excites teachers and accelerates learning. Such talk shows students that conversations can be valuable in life. Through conversation, students see that it is interesting to learn from others, wrestle with ideas together, change minds (of others and their own), and build and apply ideas to their lives. Such interactions can intrinsically motivate students to learn (Taylor et al. 2003). Students become energized by thinking together with others.

Students often prefer to talk in pairs and small groups where it is safer to make mistakes and where they can talk more. In pairs, students are even more motivated to listen because they need to show their understanding in order to respond; they do not want to offend the partner by not listening.

Finally, conversations are often unpredictable. Unpredictability, as in stories and movies, makes conversations more interesting. We don't know what our partner is going to say, and vice versa, and we look forward to some surprises as we talk.

Conversation Builds Confidence and Academic Identity (PSY)

Being listened to and having our thoughts valued is important at all ages. Moreover, the skill of valuing other people's thoughts is highly beneficial in life. Too many adults do not value the

ideas of others, and many do not know how to express how they value others' ideas. We can train students to value others' ideas and to respond by saying things like this:

Great idea! Let's write it down.

Wow, I hadn't thought of that. That makes sense.

Brilliant. Tell us more.

Juan had a great insight about how . . .

Conversation Fosters Choice, Ownership, and Control over Thinking (PSY)

Academic conversations allow students to connect to and choose ideas from their own backgrounds and experiences. Such conversations give value to students' diverse background experiences and cultures. As students build ideas from their own life experiences, they become lifelong learners who, when they face new situations, compare, assimilate, and accommodate the new with what they already know.

In building their conversation skills, students build their potential for extending talk with more capable peers and adults. Their confidence as communicators and thinkers increases. For example, in our work, students expressed that they felt more confident to talk and initiate rich conversations with older students and adults (Zwiers and Crawford 2009). This confidence is a key factor in fueling engagement in future academic interactions.

Barron and Darling-Hammond (2008) argue that we should give students authority to identify and address significant problems and challenges in a discipline. This means trusting students to collaboratively wrestle with ideas and go much deeper than memorizing standards or facts for tests. In fact, we have seen some teachers encourage their students to make a real difference in a field of study—to be change agents and shapers of the discipline rather than just consumers and assembly-line workers. Can a fourth grader shape current historical thought about the influence of the American Civil War? When the teacher's answer to this question is *yes*, great things will happen in that classroom.

Conversation Builds Academic Identity (PSY)

Identity formation is a large yet less visible part of schooling. In our research, students who conversed more and more over time gradually assumed what can best be described as academic identities. In fact, many students reported feeling smarter and more capable in their ability to talk about what they were learning (Zwiers and Crawford 2009). This formation of academic identity has a tremendous benefit for students' confidence in school, abilities to express their thinking in writing, and willingness to contribute their ideas to class discussions.

Conversation Fosters Self-Discovery (PSY)

Conversation can help students to uncover and clarify their opinions, interests, perspectives, and even their talents. As we talk with others, we more clearly see what we think about the topic. We understand our own point of view, how well it is supported or not, and how important the topic is to us. A comment from a partner on a new insight might spark an interest in us that wasn't there before. One student commented, "I didn't know I was interested in history until I started talking about it. Just memorizing it is boring." Moreover, when a partner encourages us and expresses interest in our ideas, we can discover talents in a discipline that we didn't know we had. As many famous people have remarked, "One conversation changed my life." How many genius-level talents are never discovered by our students as they sit silently in classrooms around the world?

Conversation Builds Student Voice and Empowerment (PSY)

Conversation topics often stem from issues that are generated by the students as they engage in dialogue. Paolo Freire (1970) calls these issues "generative themes." Freire states, "Students, as they are increasingly posed with problems relating to themselves in the world and with the world, will feel increasingly challenged and obliged to respond to that challenge . . . Their response to the challenge evokes new challenges, followed by new understandings; and gradually the students come to regard themselves as committed" (62). Students' generative themes, ideas, connections, questions, and conversations can then form a foundation for larger projects and classroom activities, such as debates, persuasive letters to government officials, participation in community meetings, and so on. When ideas come from students, they own their learning, hear their own voices, and build up their roles in a democratic society.

Paired Conversations Are Powerful

Finally, in this book we emphasize paired conversations for several reasons. First, pairs allow half of the students in a class to talk at any one time. Class time is precious; students get much more practice talking and listening when face-to-face in pairs. Second, pair work forces a partner to focus on and listen to what the other is saying. We all know people, perhaps even ourselves, who don't always listen closely if we are in a group where we can rely on others to do the real listening. Third, most students are afraid to share in whole-class settings and will share as little as possible. Fourth, pairs can teach each other, creating a community of acceleration and independence.

After watching many hours of video of teachers and students interacting, often in whole-class discussions, we noticed that many of the great prompts that teachers said could have been said by students. We can prepare students to be continual teachers of one another, prompting each other to think. This is advantageous because we know the power of one-on-one teaching, and if we equip students with these teacher-like skills, we can accelerate the overall learning in the class. Finally, students need to learn how to engage in extended face-to-face conversations in life. Most of their conversations will be with one other person.

Reflections

1. Have a conversation about the same topic with three different people. Compare the ideas that emerge. Compare the skills and moves that deepened and moved the conversation along. Evaluate what you learned.
2. Have conversations about three different topics with the same person at different times. Reflect on the differences and similarities.
3. Pick a content area and write down and discuss the top five facts, top five concepts, top three skills, and top three qualities that you want your students to know and have in that content area by the end of the year. How do you assess these things? How can you emphasize them enough during the year for student success?