Academic 1 Language and Academic Literacy

Literacy is at the heart of sustainable development . . . Acquiring literacy is an empowering process, enabling millions to enjoy access to knowledge and information which broadens horizons, increases opportunities, and creates alternatives for building a better life.

-Kofi Annan, 2001 Nobel Peace Prize Winner

Words are tools of learning. When words are organized effectively into language, they can become the most powerful tools in the world. Words can open up whole worlds of increased awareness and greater understanding. Words organize our actions and define us as humans. When used effectively, words contain the ability to inspire individuals and to lead nations. Words can have a tremendous impact on how people operate and learn. We also know that words act as the basic building blocks of language and learning at school. The words one chooses can create the leverage for a life of understanding and learning. Schools have their own special words and languages that coincide with the context and culture of learning. The words used in school should reveal the purposes and the pathways to success at school and beyond. So, what are the words in our schools that can have the longest lasting and greatest impact on student learning? The words that impact school the most are those that reveal *academic language*.

ACADEMIC LANGUAGE

Academic language is the formalized language of school. Academic language builds a foundation that helps our students define terms, form concepts, and construct knowledge. As key elements of academic language are emphasized and understood by all students, our schools will provide a more defined direction for learning. Dictionary.com defines the term *academic* as "Of or pertaining to college, academy, school, or other educational institution especially one of higher learning." *Language* is defined as "a body of words and the systems for their use common to a people who are of the same community or nation, the same geographical area, or the same cultural tradition." When used effectively in schools, academic language provides everyone a much clearer focus, so we, as teachers, communicate better, our students learn better, and our schools achieve better results. As we work together to improve academic language, each one of us can collectively impact student learning and make a significant difference in academic

achievement. Creating this type of improvement within our schools takes a complete understanding of both the components and principles that make up academic language and academic literacy.

Academic language is becoming a more and more important issue in education because of the demands it places on our students to perform cognitively complex actions. For example, academic language includes words like *analyze, analyzing,* and *analysis; interpret, interpreting,* and *interpretation; compare, comparing,* and *comparison;* and *identify, identifying,* and *identification.* These words require that students understand complex concepts, take action, and engage in learning patterns that stretch their thinking and learning abilities to greater heights. Gersten and colleagues (2007) define *academic language* as "the language of the classroom, of academic disciplines (science, history, literary analysis), of texts and literature, and of extended, reasoned discourse. It is more abstract and de-contextualized than conversational English" (p. 23). Students need significant academic language support to scaffold their learning for greater understanding. Hu (2008) shares the following story, which tells one student's tale of academic language and academic success at one struggling school.

Hakim's Story

Relief turned to satisfaction that Newton was not just another failing school with low test scores. This time, nearly 80% of its fourth graders had passed math, 69% language arts, and 77% science, all double-digit increases from the previous year, and one of the biggest overall gains in the Newark school system. Buried beneath the numbers were hard-won victories by students like Hakim McKenzie, 10, who repeated third grade this year. The third-grade scores also rose, with 56% passing math and 67% language arts (there is no third-grade science test). Hakim failed the math test last year because he did not understand the questions, stumped by words like "estimate" and "reduce." This year, he not only passed math but also scored high enough to earn an "advanced proficient" designation. "It's the first thing I've been good at," said Hakim, a shy boy with a toothy grin who has earned the nickname Little Teacher among his classmates because he helps them with math homework. "My friends say, 'How did you get that good in math?' I say that I use books and my teacher, Mr. Kilgore, helps me. I feel like I've achieved something really good." (p. A1)

Knowing key academic language words like *estimate*, *reduce*, *analyze*, and *conceptualize* support student's abilities to be successful in school. If our schools are going to meet the literacy demands of an increasingly challenging global environment, then academic language must be understood and mastered by all learners (Wong-Fillmore, 2007). Furthermore, academic language is important to academic literacy and the reading comprehension of students as they engage in textbooks, narrative stories, and informational texts. Academic language provides us an essential framework for developing our student's formal literacy skills for both school and career. Understanding the types of academic language and developing content-area literacy are necessary skills for constructing the learning resources that everyone needs to succeed in today's schools.

LANGUAGE GAP

As we very well know, no issue in education seems to grab people's attention today more than the *academic achievement gap*. The achievement gap describes many of the differences between the achievement results by students in low socioeconomic circumstances versus their peers. Large

numbers of students in poverty are often two grade levels or more behind their peers, and a lack of academic language affects their achievement at school. Closing the achievement gap has become both a moral imperative for our students and an economic imperative for our country. Hirsch (2003) notes, "It is now well accepted that the chief cause of the achievement gap between socioeconomic groups is a language gap" (p. 22). Most definitely, the language of learning at school is an academic language that is both precise and purposeful. Using academic language effectively means that we help learners recognize the function of language, the structure of language, and the demands of language in our classrooms. Pollock (2007) notes that the academic language of school needs to be very clear and we should use "precise terminology to describe what students will learn" (p. 3). The more accurate and precise the language used by teachers, the more students will understand the purposes of school. If our students are unable to comprehend the words and grasp the academic concepts that serve as a bridge for learning, then our students will face an ever-increasing, uphill battle in school.

LITERACY GAP

Developing powerful literacy for all of our students is at the heart of closing the achievement gap. Many students personally express that they sorely lack the language and literacy structures to succeed in school (Moats, 2000). The academic literacy gap exists because so many students of poverty struggle with basic literacy skills, and these students lack the literacy strategies to succeed. Pinkus (2008) notes the importance of literacy and learning:

Literacy is the gateway skill that students must have mastered if they are to be successful in any course; low literacy levels translate into poor grades, grade repetition, and eventual disengagement from school, all of which tend to precede a student's decision to drop out. (p, 4)

The achievement gap, which may be measured by a myriad of different assessments, reveals a large gap in literacy that separates student success from student frustration. Without the academic literacy skills to read, write, and communicate with confidence, our children will struggle to compete academically now and financially in the future. Students definitely feel the pressure created by the increasing gaps in their literacy and achievement. Every one of our students must fully develop a framework of academic literacy so that they can assume a place of learning and leadership within our communities and within the global economy.

ACHIEVEMENT GAP

Gaps in language lead to larger gaps in literacy and learning, and gaps in literacy and learning lead to gaps in achievement. When students fail to fix gaps in their language and learning, these gaps often widen and become chasms where students eventually drop out and are academically lost. Most important, our students need to develop academic language and literacy skills so that they can participate effectively in content-area classrooms, in our democratic society, and in the global economy. The lack of academic language has created a dire situation for so many of our students who come from poverty. Elmore (see Crow, 2008) notes that the achievement gap finds at its core a language gap: "In Boston, we've got about 40% of the population who . . . don't have the academic vocabulary needed to do the work" (p. 46). Directly stated, the language gap leads to a literacy gap, while the literacy gap leads to a gap in academic achievement. As the conditions grow more desperate, students need a systematic and strategic plan to directly increase their academic language and literacy, or many of them will be lost. Needless to say, American education will only realize its tremendous potential when we put language and literacy in their proper place within

every classroom. If our students never get a grip on the academic language and literacy of the classroom, they will lose their grip on their educational opportunities and may never seem to hold onto life's opportunities.

TWO CATEGORIES OF ACADEMIC LANGUAGE

Most important, understanding the language of learning at school is the beginning of building an academic foundation and framework for achievement. Overall, academic language includes two primary categories, which are critical for succeeding in school: specific content language and general academic language. The first category covers the particular terminology of a specific subject matter. Specific content language includes the specialized terms that are unique to math, science, language arts, and social studies, or those used within other school subjects. The second category of language covers the general academic language that cuts across all of the content areas at school. General academic language is commonly referred to as academic language. Academic language engages students in the key actions and processes of learning. Academic language develops necessary cognitive connections within the minds of our students and simultaneously develops their internal structures of knowledge (Marzano, 2004). Knowledge structures provide the schemata or background information needed to develop further conceptual knowledge. Academic language can help each student build deeper comprehension and connect concepts across the curriculum at school. Specific content language develops our students' depth of learning, while general academic language develops their breadth of learning.

(Specific) Content Language

First of all, specific content language is the type of academic language at school that sets math, science, language arts, social studies, and other subjects apart from each other. Specific content language provides our students with the challenge of learning the key terms and concepts of a particular subject matter. The prospect of learning specific content language increases in difficulty as our students advance through each grade level and the subject matter becomes more narrow in its focus. The narrowing of focus also leads to a greater depth of understanding. It takes a focused effort for students to learn the academic terminology that can be used as the key resources for developing concepts within a specific content area.

In addition, specific content language provides the essential building blocks from which conceptual knowledge can be built. The more a student understands the specific content language of a particular subject matter, then the faster and more efficient they can learn additional knowledge (Willingham, 2006). Providing explicit instruction in language at school is often seen as a domain only for the language arts class; yet, each subject area has its own unique academic language demands that it places on students. These specific language demands set each content area apart from other disciplines and make each discipline unique. Following are examples of content-area language.

Types of Specific Content Language

- **Social Studies** (i.e., democracy, civilization, communism, geography, and legislature)
- *Mathematics* (i.e., fraction, equation, division, angle, addition, and factor)
- *Science* (i.e., *photosynthesis*, *friction*, *compound*, *plate tectonics*, and *force*)
- **Language Arts** (i.e., alliteration, plot, genre, author's voice, theme, and irony)

Let's look at comments from several authors as they outline a few of the specific contentlanguage challenges found in various core subjects. Ogle, Klemp, and McBride (2007) outline several language challenges: "Social studies texts also contain a great deal of academic vocabulary—content-specific terminology with meanings specific to history or government. Social studies texts are filled with abstract '-isms' about economics, religion, government, and culture" (p. 14).

Schleppegrell (2007) notes that "Learning mathematics and the language of mathematics is a challenge for all students, but is especially challenging for students who have no opportunities to use academic language outside of school" (p. 141).

Bailey, Butler, Laframenta, and Ong (2004) emphasize the importance of academic language for science educators: "During science lessons, teachers exposed students to academic language within a range of instructional contexts" (p. 24).

As we have noted, specific content language serves as a basic building blocks for learning. Specific content language strengthens the depth of our student's conceptual understanding within a discipline. Learning specific content language will help our students throughout their school career and will open up more options and opportunities in a chosen field of work (Hambrick & Oswald, 2005). In college, students select a chosen field of study, and this choice often leads to a job in a chosen profession like engineering, journalism, psychology, or physics. As our students progress in their academic careers from high school to college, the academic language becomes more specific and precise. Knowing the specific content language of various disciplines can lead to greater success for our students in school and beyond.

(General) Academic Language

General academic language provides a foundation for educational success. The more academic language our students know and use, then the stronger their foundations become. The words included in general academic language act like mortar or cement. These words hold and bind specific content-area language and concepts together within the minds of students. General academic language helps our students cement the building blocks of specific content language into conceptual knowledge that in turn produces both educational and real-world results. Academic language includes the many words that connect concepts, outline transitions, and demonstrate relationships. General academic language—or what we will refer to going forward as academic language—cohesively connects the abstract concepts of school. It differs significantly from the social language of home and the playground. Chamot and O'Malley (1994) describe academic language as "the language that is used by teachers and students for the purpose of acquiring new knowledge and skills . . . imparting new information, describing abstract ideas, and developing students' conceptual understanding" (p. 40). Developing academic language requires students to engage in abstract actions and organize complex concepts, and it is the nature of uniting these ideas that makes academic language cognitively challenging for all learners.

Academic language is powerful because of its ability to integrate and tie together many important concepts in the various content areas. For example, terms like *consider, evaluate, synthesize, revise, compare,* and *determine* are academic words that can be applied to every content area. Knowing how to use this academic language in each class subject helps all students see how learning is integrated throughout school. As we have noted, academic language acts as both the mortar for cementing the building blocks of specific content language together and as a scaffold for concept development. Look over the three types of academic language that serve as cohesive devices that develop academic coherence for our student's learning.

Types of Academic Language

- *Actions* (i.e., recognize, monitor, analyze, connect, achieve, and require)
- *Transitions/Relationships* (i.e., in addition, first, in fact, furthermore, nonetheless, and finally)
- *Concepts* (i.e., *abstraction*, *function*, *repertoire*, *evidence*, and *features*)

Let's look, for example, at the concepts associated with the terms analyze, analyzing, or analysis as we consider the importance of academic language. Our students are asked to analyze a variety of information at school, yet many of them may have little explicit understanding of this term or how it is used. The word can be particularly difficult for our English language learners, special education students, or the socioeconomically disadvantaged. As learners are repeatedly taught this key academic word in several classes, they can begin to recognize the importance of this word to their success at school. In a mathematics class, the concept of analyzing is developed in ways that look at problem solving. In a science class, the concept of analysis is a key part of investigation. Language arts classes encourage analyzing the characterization traits of human nature in the context of the human condition in literature. Social studies classes analyze the causes and effects of war on the economic, social, and political systems of a country. When our students learn that the term analyze simply refers to a method for breaking their learning down into parts, then they can see how the term is used in various subject areas.

As our students learn how to mentally classify or categorize items into parts and see patterns of relationships through the process of analysis, they are better prepared to accomplish the learning tasks assigned in school. Making sure that every student understands academic language terms, like *analyzing*, provides each student a much richer experience and a greater opportunity for academic success. Knowing the academic language that is expected in school can produce powerful results because the skill of analyzing carries over to so many academic challenges and career contexts. Academic language connects the learning processes within academic disciplines and helps learners access the language of professions. As we will discuss further in Chapter 2, academic language cohesively cements specific content language into meaningful sentences, paragraphs, and essays by providing the actions, relationships, transitions, and concepts that unite ideas.

AN ACADEMIC CHALLENGE

How can we grasp the importance of helping our students fully recognize the value of explicitly learning academic language? Let's take some time and look at the challenges that face so many of our students who have difficulty with academic language. The following example is a mathematics question taken from a California Standards Test (National Testing Services, 2007) for sixth graders. Please take a minute and read the question carefully as many times as needed and then write down your answer. After writing down your answer, record next to it your level of confidence that you have correctly answered the question.

Solamente queda un pedazo en que se puede construer, y el cine ocupara todo eso completamente. En ese frase, la palabra pedazo significa

A.	mucho de algo	
В.	un grupo complete	
C.	una seccion de tierra	
D.	la resulta de un chance	
Ar	nswer Co	onfidence (

Most educators, when presented with this question, unless they are fluent in Spanish, find that although they love learning, their persistence and motivation drops sharply as they face the academic demands made by this question.

Let's attempt the question one more time, now with some of the words translated into English. Take a minute to read the question thoroughly and determine which answer is correct. Again, write in your answer and record what level of confidence you have in your answer.

Only remains *un pedazo en* question *se puede construer, y el* theater occupied all *eso* space. *En ese* sentence, the word *pedazo* means

Δν	ngrazon	Confidence	0/.
D.	result of chance		
C.	section of land		
В.	complete group		
A.	great amount		

Think briefly how you might feel about school if each question on a test or daily classroom activities offered more of these same challenges. We know that motivation and self-confidence greatly affect rates of learning. What happens to your motivation and confidence as you face these questions? Typically, educators respond that their confidence and motivation are diminished dramatically, and the realization that academic language is so closely tied to our ability to convey knowledge becomes evident. Remember that for English language learners, academic language is the third register that they are asked to develop (the first is their native language; the second is English). If you would like the correct answer to the preceding question, please turn to the end of this chapter.

ACADEMIC LANGUAGE DEMANDS

As educators, we sometimes take for granted the demands that language can make on learning. Most of us enjoyed the process of school and succeeded with its language demands. Becoming more aware of the language demands that the rigors of successful schooling can place on each learner helps us recognize the increasing needs of our students to learn academic language consistently and comprehensively. When a reading passage contains a high degree of language complexity and a high degree of academic language density, then the language is said to have a high degree of academic demand (Bailey & Butler, 2003). In fact, this paragraph may be more challenging to read than the headlines in a daily newspaper, as it contains elements of academic language that are cognitively abstract, structurally complex, and conceptually dense. In upcoming chapters, we will discuss strategies for developing student comprehension in textbook passages that contain academic language with a high degree of academic complexity and density.

Furthermore, academic language contains the words that sentences are predicated upon, as well as the words that coherently connect concepts and integrate related ideas. As previously mentioned, academic language can be separated into three types of functions or word types: action words, transition/relationship words, and concept words. Action words reveal internal processes, and they function in ways that expect the reader to think about learning (Swartz, Costa, Beyer, Regan, & Kallick, 2007). The transition words included in academic language are those that signal text-based transitions and identify conceptual relationships. The concept words included in academic language are those that connect complex ideas together. As we progress throughout the book, the term academic language will refer to the words and language patterns that help to reveal the cognitive actions, text-based transitions, and complex concepts of powerful learning.

ACADEMIC CASUALTIES

The current reality is that students who only know the casual language of the neighborhood and streets most often become casualties of an educational system that neglects to ensure academic language is learned and academic literacy is developed. Academic casualties lack the physical wounds of real war, yet they are essentially handicapped when it comes to advancing in professions where formal language is an operational necessity. We find significant numbers of these students eventually dropping out of school and becoming casualties of the achievement gap. The national average for dropout rates throughout the country is currently nearing 30%. In inner city high schools and high-poverty rural areas, the dropout rates are often above 50%. Why do we have such tremendously high dropout rates, particularly among poor minorities? When asked, these students have shared that a lack of literacy skills tops the list of factors that influenced their academically fatal decisions. Consider the following facts regarding school dropouts:

- Every school year, 1.2 million of our youth drop out of high school (Alliance for Education, n.d.). The most commonly cited reason is the lack of literacy skills to negotiate the demands of school (Kamil, 2003; Snow & Biancarosa, 2003).
- Students who enter the ninth grade with academic language and literacy skills that are in the lowest quartile are 20 times more likely to drop out of school than the highest performing students (Carnevale, 2001).
- Over 40% of African-American students and 45% of Hispanic students fail to graduate from high school with their peers (Orfield, Losen, Wald, & Swanson, 2004).
- More than 75% of school dropouts mentioned that difficulties in their ability to read in core classes significantly contributed to their decision to drop out (Lyon, 2001).
- Far greater numbers of American workers need the basics of reading, writing, speaking, and listening to support the in-depth knowledge, intellectual creativity, and mental flexibility that is required in our current economic landscape (Kirsch et al., 2002).

The facts from the research reveal how far we have to go in providing a language foundation for all students, particularly for those students that are English language learners, economically disadvantaged, or racial minorities. At a time when intellectual capital is at a premium, our schools are seeing increasing dropout rates. Bill Cosby (Cosby & Poussaint, 2007) states very directly, "Let's face it—the high dropout rate for black students is related in part to poorly developed language skills, and this shortcoming keeps getting bigger and bigger over the years" (p. 61). Recognizing the intertwining connections between academic language, socioeconomic disadvantage, school dropouts, and the achievement gap has become crucial for all educators. As our students learn academic language, they will increase their abilities to succeed in school and increase the likelihood that they will remain in school rather than become another statistical casualty.

IMPROVING ACADEMIC LANGUAGE AND LITERACY

Whether you are a teacher leader, site leader, or district leader, you can more fully develop your understanding of academic language. Stronge (2007) highlights a major connection between a classroom teachers' language skills and student learning, "One key finding has emerged: students taught by teachers with greater verbal ability learn more than those taught by teachers with lower verbal ability" (p. 15). The more a teacher uses and models academic language with students, the better the students will achieve academic results. Improving the abilities of all educators to effectively model and instruct academic language will provide a foundation for social justice and support a framework for academic literacy for each student.

A major goal of this book is to help you, as an educational leader in your classroom and school, provide all students with the academic language to negotiate the challenges of literacy and learning. So many of our students enter school with gaps in their language skills, and they lack the ability to identify the terms and understand the concepts that will help them learn effectively and efficiently at school. These students need explicit instruction in academic language and engaging classroom experiences in academic literacy. This book will help you accomplish three things as an educational teacher and leader. After completing this book you will be able to

- 1. Develop a greater understanding of academic language and be able to model explicit instruction in academic language to support your students every day.
- 2. Learn current and confirmed methods that show how to explicitly support student learning in academic language and academic literacy for all students.
- 3. Engage students in specific classroom strategies that will improve academic literacy through reading, listening, speaking, and writing.

ACADEMIC LANGUAGE TOOLS AND RESOURCES

In addition, this book contains one very exciting resource—an inclusive list of academic words that every student should learn at each grade level to develop their language of learning. Appendix I provides teacher leaders *Academic Language Grade-Level Lists* for each elementary grade, K–6, for each middle school grade, 7–8, and for each high school grade, 9–12. These thirteen lists provide key words and lay a foundational model for supporting academic language within schools. They have been designed to serve as a starting point for developing a systematic program for instruction in academic language, concepts, and patterns. Additionally, Appendix II highlights several *specific content language resources* for each grade level, K–12. These specific content language lists can provide you, as a teacher leader or school leader, a common reference point for developing your own specific content-area language lists that will best fit the academic needs of your particular school, classroom, and individual students.

SUMMARY

As we have discussed, when educators engage their learners in the foundational elements of academic language, a framework for academic literacy can fully develop for all students. The specific contentarea language serves as the building blocks for learning, while the academic language acts as the mortar which cements these chunks of knowledge together. As students like Hakim and others increase their ability to construct meaning using the bricks of specific content language and the mortar of academic language, they will find their ability to succeed in school significantly improves. Research links academic language, academic literacy, the achievement gap, and dropout and graduation rates together. Unfortunately for socioeconomically disadvantaged children, the dynamics cycle in a downward spiral that often leads to significant gaps in achievement and overwhelming dropout rates. Knowing the casual language of the streets without knowing the academic language of school can cause students to become academic casualties. Our schools can be transformed as we scaffold instruction and provide strategies that reveal the academic language of cognitive actions, text transitions, and complex concepts. As instructional leaders, we can generate greater academic results when we create a culture of learning around academic language and align and integrate academic literacy for every student.

PERSONAL REFLECTIONS

- 1. How often do I provide instruction in both specific content language and general academic language?
- 2. How do I use my knowledge of language and learning to reduce the academic achievement gap?
- 3. What strategies do I provide my students to improve their literacy in grade-level content?
- **P.S.** As you read through the upcoming chapters, you will discover a simple-to-follow framework for developing academic language in the classroom as well as powerful strategies for developing academic literacy throughout your school and district. As you proceed, you may decide that you want to jump right into the classroom literacy strategies, so feel free to go directly to Chapter 4. On the other hand, you may want to gain a more complete understanding of academic language and literacy and move sequentially through Chapters 2 and 3. Or, you may decide you are tempted to turn to the academic gradelevel lists and sneak a peek in the appendix. Whichever way you decide to proceed, enjoy the journey!

The answer to An Academic Challenge is C, una seccion de tierra [a section of land].