

More than Vocabulary: Academic Language - Key to Comprehension

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Goals for today

Learn:

- The function of **academic language** in thinking, reading and writing
- To cultivate **academic language** acquisition
- To identify variations of **academic language** across content areas
- To build **academic language** into discussions, instruction, and assessments

The Many Strands of Early Reading Success

ORAL LANGUAGE COMPREHENSION

LITERACY KNOWLEDGE (print concepts, genres, etc.)

BACKGROUND KNOWLEDGE

(fact, concepts, etc.)

VOCABULARY, esp. expressive
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES

(syntax, semantics, etc.)

VERBAL REASONING

(inference, metaphor, etc.)

WORD RECOGNITION

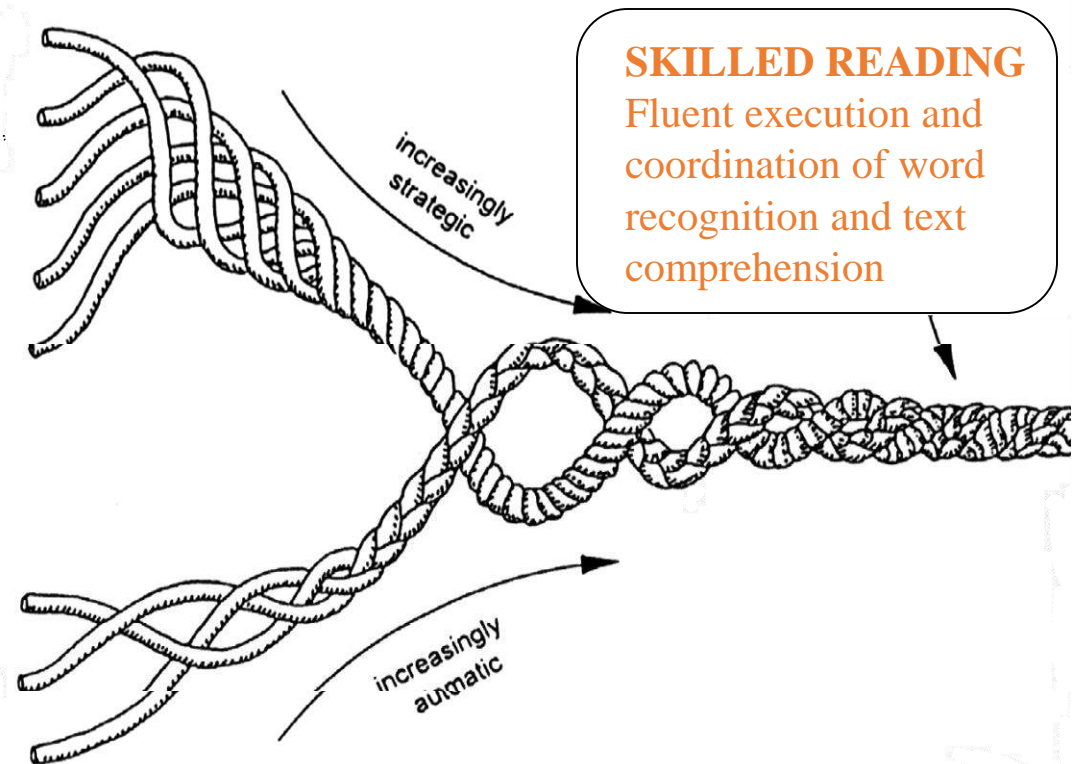
PHONOLOGICAL AWARENESS

(syllables, phonemes, etc.)

DECODING (alphabetic principle,
spelling-sound correspondences)

SIGHT RECOGNITION

(of familiar words)



Adapted from
Scarborough, 2000
Haskins
Laboratories

"Overcoming the Language Gap"

Louisa C. Moats

"Teachers must immerse (students) in the rich language of books.

Children need to rehearse the rules of discourse, such as staying on topic, taking turns, and giving enough information so the listener understands.

Children must learn how to speak in discussions, to question, paraphrase, retell and summarize...

Teachers must teach directly the form, meaning and use of words, phrases, sentences, and texts."

First and foremost, every teacher must also be a language teacher.

Teachers not only need content knowledge, teachers must:

- be cognizant of the language used in instruction
- anticipate the language needs of students
- work with students to identify any language misconceptions
- realize there is a gap between the language a student knows and what is required to succeed academically.



Early vocabulary knowledge is a robust predictor of students' later reading comprehension.

Students need:

- Several exposures to new words: Tier Two Vocabulary (new labels for known concepts)
- Both definitional and contextual information
- Engagement in deep processing of the words

Beyond Tier Two vocabulary instruction students need:

- To understand the "language of school" to reach high levels of academic achievement, particularly in content area instruction.
- **Academic Language**

What is Academic Language?

- Language used in the learning of academic subject matter in formal schooling context
- Aspects of language strongly associated with literacy and academic achievement, including specific academic terms or technical language, and speech registers related to each field of study

Developing Academic Language

Levels of vocabulary knowledge

1. I never saw/heard it before.
2. I've heard it but don't know what it means.
3. I recognize it in context. It has something to do with...
4. I know it and can use it confidently.

Students need structured opportunities to develop the understanding to know and to use academic language.

(Dale & O'Rourke, 1986; Marzano, 2004)

School Talk

(Academic Language)

Academic Language is defined 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.” (Chamot and O’Malley 1994 p. 40)

School Talk

Academic language functions (e.g., being able to explain, describe, contrast, etc.) are "the tasks that language users must be able to perform in the content areas."

(Chamot and O'Malley, 1994 p. 40)

School Talk

- The language of **textbooks**
- The language used in **employment**
- The language of **instruction**
- The language of **learning**

School Talk

:Specialized Content

Academic language:

- Stands in contrast to the everyday informal speech that students use outside the classroom environment
- Comprises both the specialized content specific language, such as the conceptual terminology of science (e.g., osmosis, igneous, biodiversity) & the nonspecialized language that cuts across content areas.”

Bailey & Butler

Academic English is:

- The language of the classroom, academic disciplines (science, history, literary analysis), texts and literature, and extended, reasoned discourse.
- More abstract and decontextualized than conversational English.

In **Academic English** some words used in everyday conversation (*fault, power, or force*) take on special meanings when used in science.

School Talk

:Non-specialized

- Mode of communication (oral/print) that is not specific to any one content area
- A “register” or a precise way of using language - specific to educational settings.

Formal vocabulary, such as “examine” and “cause” encountered in school

VS

Everyday vocabulary such as “look at” and “make” as encountered in informal settings.

Bailey, 2000b; Cunningham & Moore, 1993

Cool Talk

- Conversational Language
- Mall Talk
- Text messaging
- Slang
- Grammatical Errors
- Incomplete sentences
- “Ya know, like...”

When Cool Talk Meets School Talk; Whitney, 2007

Txt Msg

- A3 Anytime, anywhere, anyplace
- BBIAM Be back in a minute
- L8R Later
- BRB Be right back
- TLK2UL8R Talk to you later
- G2G Got to go
- JFGI Just freaking Google it
- MOS Mother over shoulder
- NBD No big deal
- P911 Parents coming into room alert
- PAW Parents are watching
- RUOK Are you OK?
- PU That stinks!
- TTFN Ta ta for now

Slanguage

“down”

1. to be part of a group or friendship. Committed to watch their back.

"No worries Chris. You know I'm down."

2. agreeing or assenting with.

"I'm down with whatever you decide."

“my bad”

1. a phrase said to admit guilt in a situation.

"Oh, that's not your grandma, that's your mom? My bad!"

Slanguage

"minute" or "a minute"

1. A long time. Not just 60 seconds.

"Dang! I haven't seen you in a minute, girl, where you been?"

"boo-yah!"

1. An exclamation used in celebrating a victory.

"Boo-Yah! I whooped you in that basketball game!"

2. An expression added at the end of a short, insulting speech.

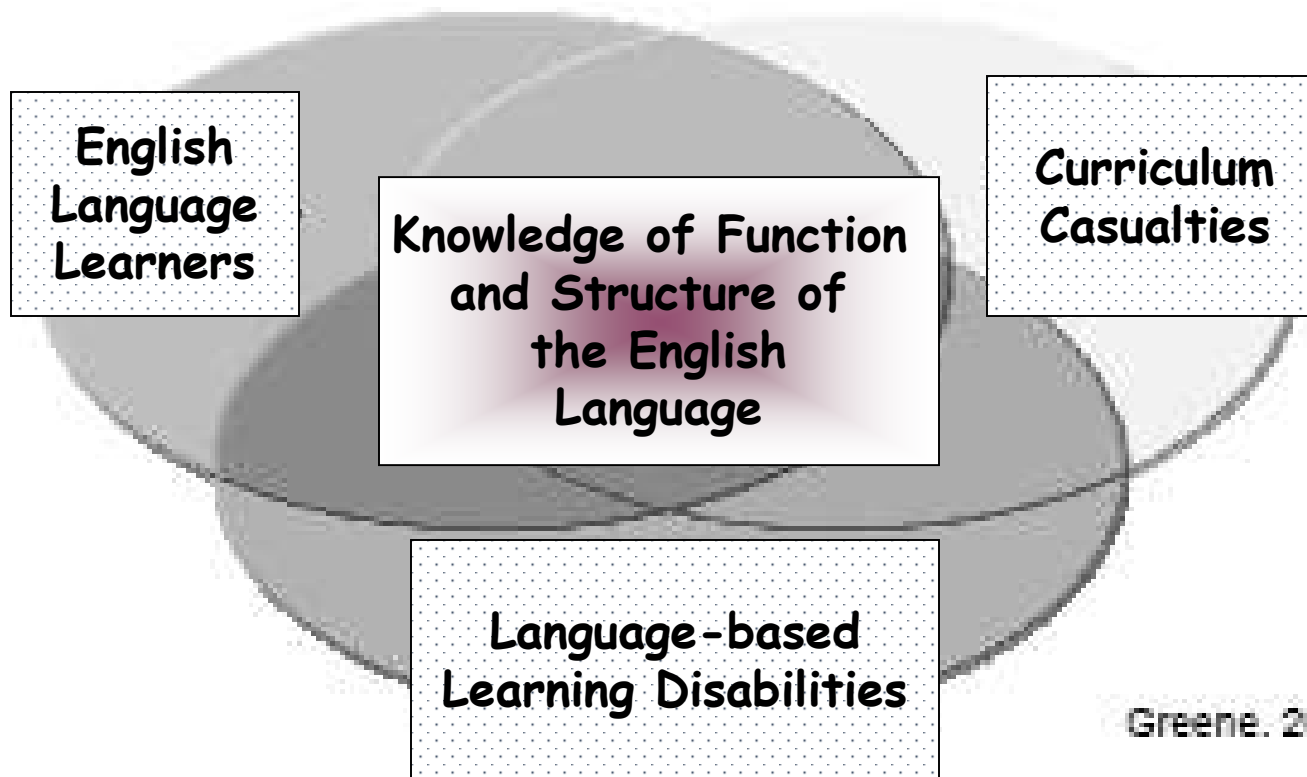
Used like "So, there!"

Who Cares?

With employers, teachers and national studies criticizing students' ability to write clearly, *grammar instruction is back.*

- Textbooks and tests are written in **academic language**
- Employment opportunities require **academic language**
- Students who do not master **academic language** have limited life opportunities.

Who Needs It? All Students...



Greene. 2006

Limited Academic Vocabulary Understanding Results in...

- Misuse of words or word forms
- Using conversational words in academic writing
- Use of acoustic approximations
(the novel Catch Her in the Right)

Robin Scarcella, University of California, Irvine '96

Limited Understanding of Standard English Morphology & Syntax results in...

- Misuse of articles, pronouns, and nouns
- Misuse handling verb tenses
- Inability to handle causative and conditional structures

Robin Scarcella, University of California, Irvine '96

Academic Language is a Key Organizing Principle

Development of academic language

- is fundamental to academic success for **all** students in **all** domains
- is the primary source of ELs' difficulties with academic content at all ages and grades
- can remain a challenge even after students achieve proficiency on current state language proficiency tests
- affects students' (particularly ELs') performance on large-scale assessments

Academic Language

- Impossible to overstate the role that academic language plays in determining students' success
- Good conversational English skills may be accompanied by limited academic language skills
 - In studies of elementary and middle school students, including those no longer designated as LEP, mean vocabulary scores below the 20th percentile are not uncommon.

Academic Language is comprised of many skills:

- **Vocabulary knowledge** (both depth and breadth)
 - **Depth** – knowing multiple meanings, both common and uncommon, for a given word
 - **Breadth** – knowing the meanings of many words, including multiple words for the same, or related, concepts
- **Written vocabulary as *distinct* from oral vocabulary**
- **Understanding of complex sentence structures and syntax**
- **Understanding the structure of argument, academic discourse, and expository text**

Most scholars believe:

- Instruction in **academic English** should be done early, consistently, and simultaneously across content areas.
- Instructional time should focus on the explicit instruction of **academic English** beginning in primary grades.
- Can make a difference in students' ability to understand the core curriculum
- Its importance increases as children enter the upper grades.

August & Hakuta (1997); Bailey (2006); Rivera, et al. (2006);
Genesee, Lindholm-Leary, Saunders, & Christian (2006); Goldenberg (2006);
Scarcella (2003); Schleppegrell (2001, 2004); Snow & Fillmore (2000)

- In **reading**, knowledge of **academic English** helps students gain perspective on what they read, understand relationships, and follow logical lines of thought.
- In **writing**, knowledge of **academic English** helps students develop topic sentences, provide smooth transitions between ideas, and edit their writing effectively.

ELLs

- Instruction focused on **academic English** should not wait until students are able to read and write in English.
- English learners do not need to master conversational oral English before they are taught the features of **academic English**.
- Before English learners are reading, the development of age-appropriate **academic English**—morphology, syntax, vocabulary—can be accelerated orally through planned and deliberate daily instruction.

Vocabulary

75% of English learners feel that vocabulary is the key to understanding English

In addition to the content specific / technical words there are **four** other categories of words that may be unknown or misunderstood by students, particularly ELs:

- New usages of familiar words
- Synonyms
- Idioms and
- Just plain new words

“Strike” (In conversation)

- Police thought the murderer might strike again.
- He tried to strike the match.
- A brilliant idea suddenly struck him.
- The clock struck two.
- The dog was struck by a car.
- Strike it rich.
- Strike while the iron is hot.
- He tried unsuccessfully to strike up a conversation.

“Strike” (In textbooks)

Industry:

- The workers went on strike.

Mining:

- The prospectors were hoping to strike gold.

Weather:

- Lightning can strike before a storm.

Military:

- The air strike was considered successful.

Other common words that denote different concepts:

Science:

energy mass matter
force kingdom

Math:

table round root
power product

Synonyms

Consider this:

$$\begin{array}{r} 8 \\ -5 \\ \hline \end{array}$$

- Subtract 5 from 8
- Take 5 away from 8
- Take away 5 from 8
- 8 minus 5 equals ...?
- 8 less 5 equals ...?
- 5 from 8 equals ...?

Freedom

Think about the different words and phrases that are used to represent the concept of **FREEDOM.**

autonomy

liberation

self-reliance

emancipation

liberty

self-sufficiency

home rule

self-determination

independence

self-government

sovereignty

Idioms

- She really put her foot in her mouth
- It's raining cats and dogs
- I'm all ears
- He's got two left feet
- Put your best foot forward
- A little bird told me
- A penny for your thoughts
- Needle in a haystack
- Walk on eggshells
- Whatever floats your boat

Textbook Aids/Text Features

Factors to keep in mind when introducing textbooks:

Contents

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Glossary

Appendix

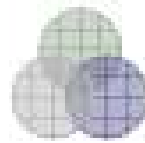
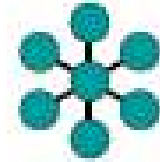
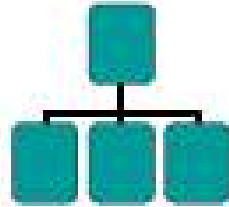
Chapter openers

Summaries

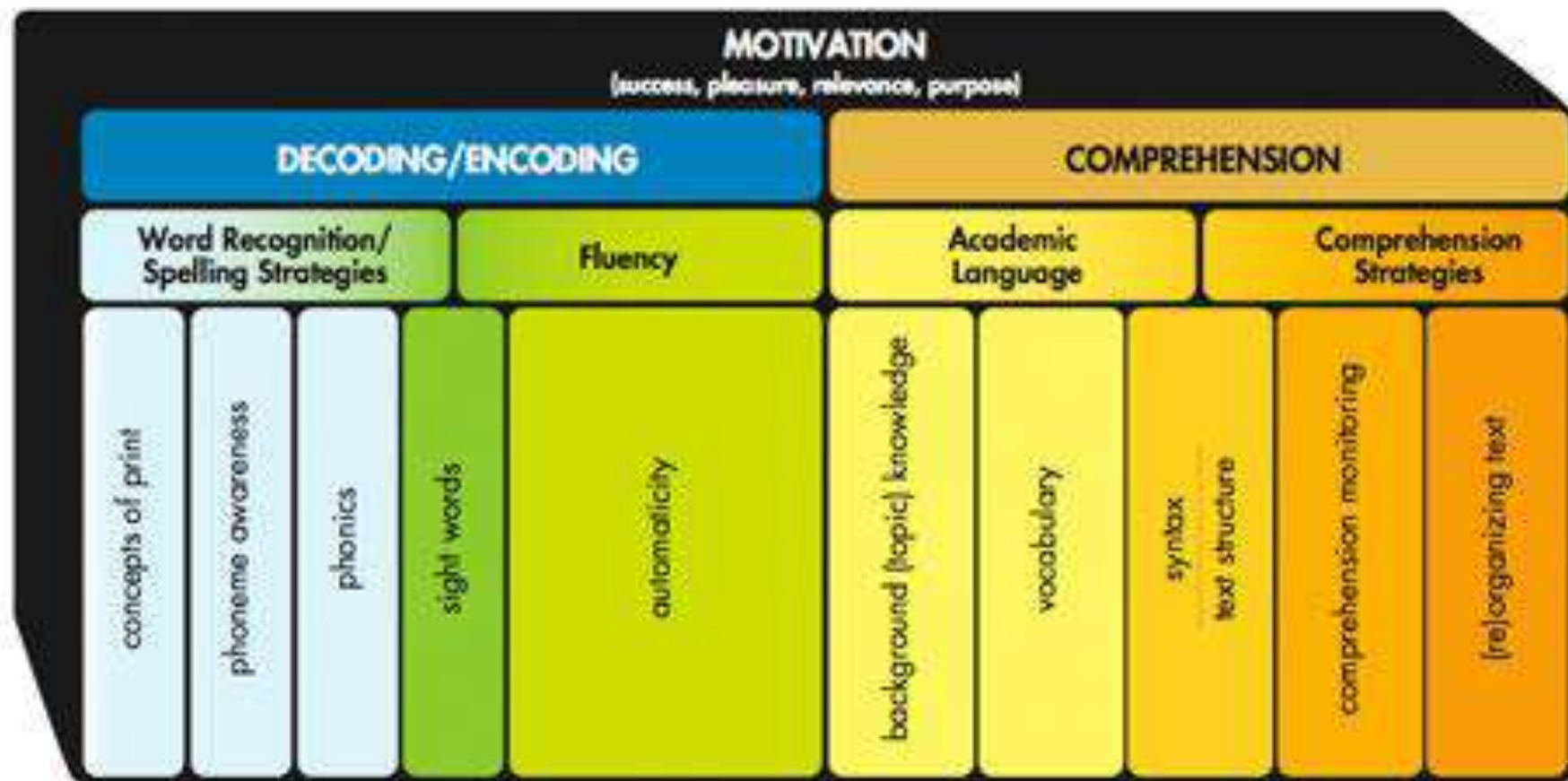
Chapter closers

Focus on the Text Features/Layout

- Charts
- Maps
- Photos / Pictures
- Diagram
- Graph / Tables
- Boldfaced type
- Boxes / Lists



LITERACY FRAMEWORK FOR ASSESSMENT AND INSTRUCTION



Academic Language

Language that requires learners to:

- Extract meaning and information
(knowledge, reading, & language skills)
- Evaluate evidence and relate to other ideas
and information (knowledge)
- Recognize and analyze textual conventions
used in various genres (reading skills)
- Summarize using cues to interpret and infer
authors' intentions (language skills)

Adapted from Robin Scarcella & Susana Dutro

Academic Language Example....

“If we hadn’t deprived the soil of essential nutrients, the plant would have grown larger.”

What is required to understand this sentence?

Susana Dutro, 2007

“If we hadn’t deprived the soil of essential nutrients, the plant would have grown larger.”

- Content Knowledge
- Reading Skill
- Language Skill

What can teachers do???

Reading, content knowledge, and the structures of language must be explicitly taught and purposefully developed.

Susana Dutro, 2007

Language Functions

Students are expected to:

- Identify main ideas
- Relate observable events
- Ask and answer questions

Grammatical Forms are Tools

Each language function or task requires different grammatical forms (tools):

- **Verb phrases** help us retell
- **Prepositional phrases** enable us to describe where something is located
- Telling about a person or thing requires the use of **nouns and pronouns.**

Susana Dutro 2007



LANGUAGE INSTRUCTION

Functions

Represent cognitive tasks
|
Purposes for expressing thinking
|
Informs text structure

Forms

Syntax
|
Word usage
|
Sentence Structure
|
Grammatical features

Fluency

Ease of comprehension and production
|
Accuracy
|
Appropriate to context and purpose

Forms Follow Function Match

Language Functions Task	Grammatical Forms Tools
1. Compare & Contrast	a. Formulating Questions with who, what, & where
2. Describe Actions & Sequence	b. Adjectives
3. Give & Follow Directions	c. -er, -est endings
4. Describe places & locations	d. Past tense verbs
5. Describe objects	e. Prepositional Phrases
6. Seek information	f. Imperative tense (verb + object w/ understood subject)

TOPIC: LANDFORMS

FUNCTION: COMPARE/CONTRAST

Beginning	Early Intermediate	Intermediate	Early Advanced	Advanced
<i>big</i> ocean <i>small</i> lake	An ocean <u>is big</u> . A lake <u>is small</u> .	An ocean <u>is larger than</u> a lake.	An ocean <u>is enormous compared to</u> a lake.	An ocean <u>is vast</u> . <u>Even the largest lake is small by comparison</u> .

EXAMPLE: SEQUENCING EVENTS

Early Intermediate	Intermediate	Early Advanced	Advanced
The volcano was smoking . The lava was shooting out.	<u>Last week</u> , the volcano started smoking . <u>This week</u> , it erupted and lava came shooting out.	<u>For the past two weeks</u> , the volcano had been smoking , and <u>this week</u> , it finally erupted violently.	<u>It has been two years since</u> the volcano erupted violently, and <u>only recently</u> that the people of the town have been able to return.

Source: A Focused Approach to English Language Development, CRLP, Dutro & Prestridge

Bricks & Mortar: Teaching the Mortar

- Connects topic-specific vocabulary
- is the purpose for communication
- Language patterns
- Is essential



(Dutro 2007)

- "Mortar" words and phrases are the basic and general utility vocabulary required for constructing sentences.
- Mortar words determine the relationships between and among words.
- Mortar words hold language together and are essential to comprehension.

Examples:

- Connecting words required to construct complex sentences such as: because, then, but, sometimes, before, therefore, however, whereas
- Prepositions and prepositional phrases such as: on, in, under, behind, next to, in front of, between, in the background
- Basic regular and irregular verbs such as: leave, live, eat, use, saw, went
- Pronouns such as: she, his, their, it, us, each other, themselves
- General academic vocabulary such as: notice, think, analyze, direct, plan, compare, proof, survive, characteristics

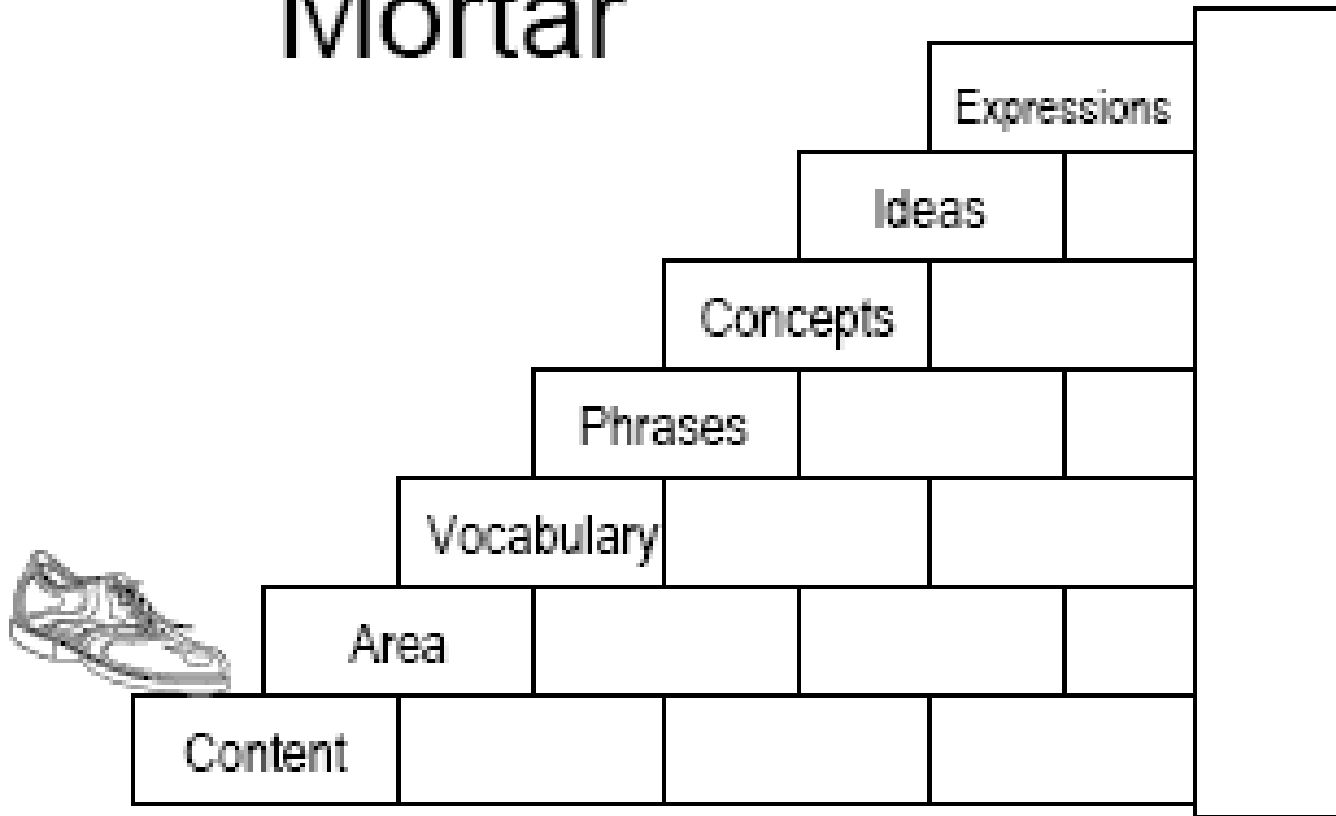
Topic Specific Vocabulary: Teaching the Bricks

- Teach some **Tier 3** words so students can talk about the area of study
- Bricks are the topic specific words of study -

Anne Whitney, 2007

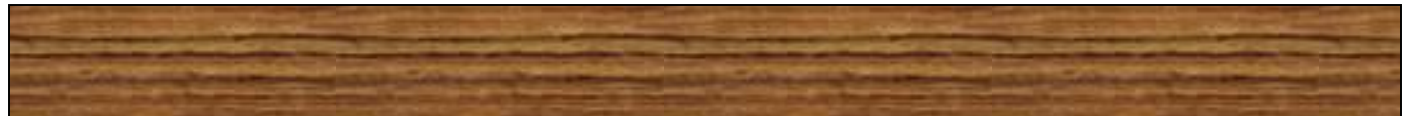
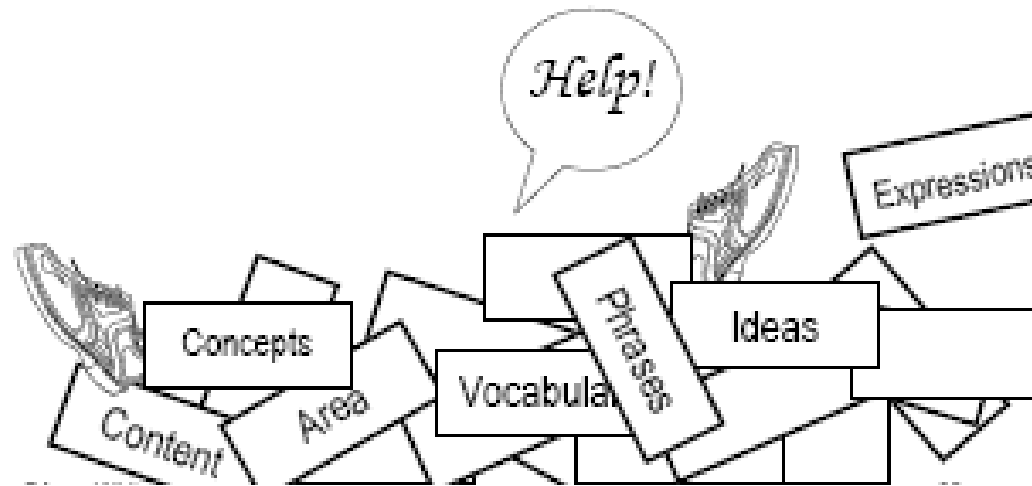
Bricks and Mortar

Mortar



Anne Whitney, 2007

Without the Mortar...



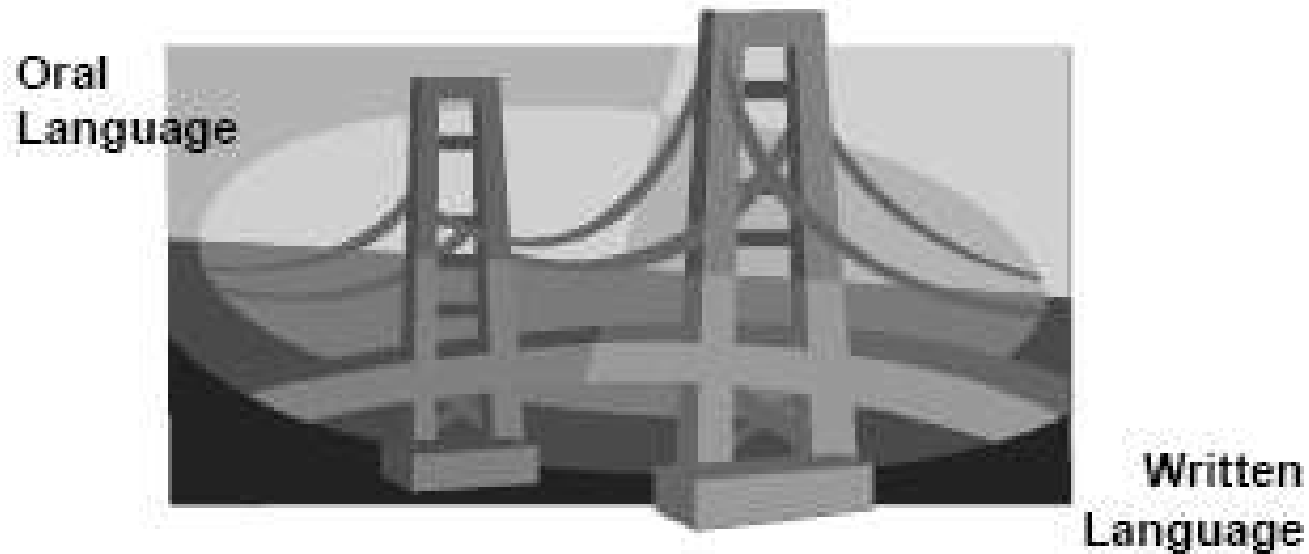
Anne Whitney, 2007

So, what do teachers do???

- Connect oral language and written language.
- Teach effective reading **AND** writing skills to include academic vocabulary, grammar, and syntax.

Anne Whitney, 2007

Build a Bridge from Oral Language to Written Language



Anne Whitney, 2007

Function of school writing

“ It is impossible to understand the teaching of writing in America if one does not realize that, in one form or another, from the first grade through graduate school, it serves mostly to test reading --- either reading comprehension or the comprehensiveness of one’s reading”



Moffett, 1988

<http://www.all4ed.org>

Eleven Elements of Effective Adolescent Writing Instruction”

- **Writing Strategies:** teaching students strategies for planning, revising, and editing their compositions
- **Summarization:** explicitly and systematically teaching students how to summarize texts
- **Collaborative Writing:** instructional arrangements in which adolescents work together to plan, draft, revise, and edit their compositions
- **Specific Product Goals:** assigns students specific, reachable goals for the writing they are to complete
- **Word Processing:** uses computers and word processors as instructional supports for writing assignments
- **Sentence Combining:** involves teaching students to construct more complex, sophisticated sentences

- **Prewriting:** engages students in activities designed to help them generate or organize ideas for their composition
- **Inquiry Activities:** engages students in analyzing immediate, concrete data to help them develop ideas and content for a particular writing task
- **Process Writing Approach:** a number of writing instructional activities in a workshop environment that stresses extended writing opportunities, writing for authentic audiences, personalized instruction, and cycles of writing
- **Study of Models:** provides students with opportunities to read, analyze, and emulate models of good writing
- **Writing for Content Learning:** uses writing as a tool for learning content material



Bloom's Taxonomy

Direct instruction in the vocabulary,
grammar, and response format to
Bloom's Taxonomy

Higher-order thinking

BLOOM'S REVISED TAXONOMY

Creating

Generating new ideas, products, or ways of viewing things
Designing, constructing, planning, producing, inventing.

Evaluating

Justifying a decision or course of action
Checking, hypothesising, critiquing, experimenting, judging

Analyzing

Breaking information into parts to explore understandings and relationships
Comparing, organising, deconstructing, interrogating, finding

Applying

Using information in another familiar situation
Implementing, carrying out, using, executing

Understanding

Explaining ideas or concepts
Interpreting, summarising, paraphrasing, classifying, explaining

Remembering

Recalling information
Recognizing, listing, describing, retrieving, naming, finding

Questions for Remembering

- **What happened after...?**
- **How many...?**
- **What is...?**
- **Who was it that...?**
- **Can you name ...?**
- **Find the definition of...**
- **Describe what happened after...**
- **Who spoke to...?**
- **Which is true or false...?**

(Pohl, *Learning to Think, Thinking to Learn*, p. 12)

Questions for Understanding

- **Can you explain why...?**
- **Can you write in your own words?**
- **How would you explain...?**
- **Can you write a brief outline...?**
- **What do you think could have happened next...?**
- **Who do you think...?**
- **What was the main idea...?**
- **Can you clarify...?**
- **Can you illustrate...?**
- **Does everyone act in the way that does?**

(Pohl, *Learning to Think, Thinking to Learn*, p. 12)

Questions for Applying

- **Do you know of another instance where...?**
- **Can you group by characteristics such as...?**
- **Which factors would you change if...?**
- **What questions would you ask of...?**
- **From the information given, can you develop a set of instructions about...?**

(Pohl, *Learning to Think, Thinking to Learn*, p. 13)

Question for Analyzing

- Which events could not have happened?
- If. ..happened, what might the ending have been?
- How is...similar to...?
- What do you see as other possible outcomes?
- Why did...changes occur?
- Can you explain what must have happened when...?
- What are some of the problems of...?
- Can you distinguish between...?
- What were some of the motives behind..?
 - What was the turning point?
 - What was the problem with...?

(Pohl, *Learning to Think, Thinking to Learn*, p. 13)

Questions for Evaluating

- Is there a better solution to...?
- Judge the value of... What do you think about...?
- Can you defend your position about...?
- Do you think...is a good or bad thing?
- How would you have handled...?
- What changes to.. would you recommend?
- Do you believe...? How would you feel if. ...?
- How effective are. ...?
- What are the consequences..?
- What influence will....have on our lives?
- What are the pros and cons of....?
- Why isof value?
- What are the alternatives?
- Who will gain & who will loose?

Questions for Creating

- **Can you design a...to...?**
- **Can you see a possible solution to...?**
- **If you had access to all resources, how would you deal with...?**
- **Why don't you devise your own way to...?**
- **What would happen if ...?**
- **How many ways can you...?**
- **Can you create new and unusual uses for...?**
- **Can you develop a proposal which would...?**

(Pohl, *Learning to Think, Thinking to Learn*, p. 14)

***He who learns but does not
think is lost***

(Chinese Proverb)

***Language in the currency of
thinking***

(My belief)

If a seed of lettuce will not grow, we do not blame the lettuce. Instead, the fault lies with us for not having nourished the seed properly.

Buddhist Proverb

