1. Academic Vocabulary Intensive

Evidence-Based Facilitator Guide: Improving Intermediate Academic Content and Literacy for English Learners

Photo is for illustrative purposes only.
Any person depicted in the photo is a model.

DEPARTMENT OF EDUCATION · STATE OF IDAHO

Quote

" *Words are not just words . . . it is through words that we build, refine, and modify our knowledge. What makes vocabulary valuable and important is not the words themselves so much as the understandings they afford.*

The Challenge of Advanced Texts: The Interdependence of Reading and Learning M. J. Adams, 2009, p. 180

Idaho Content Standards
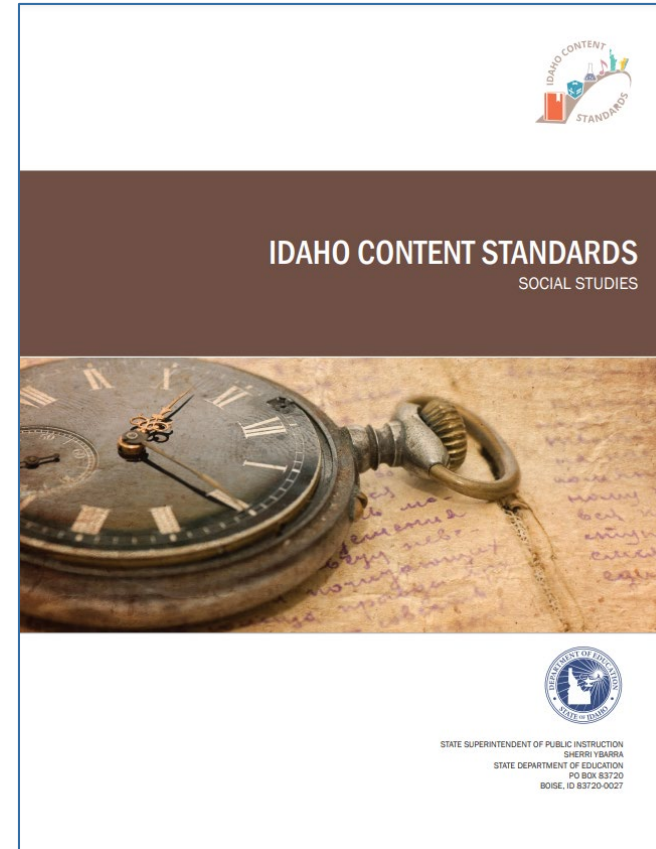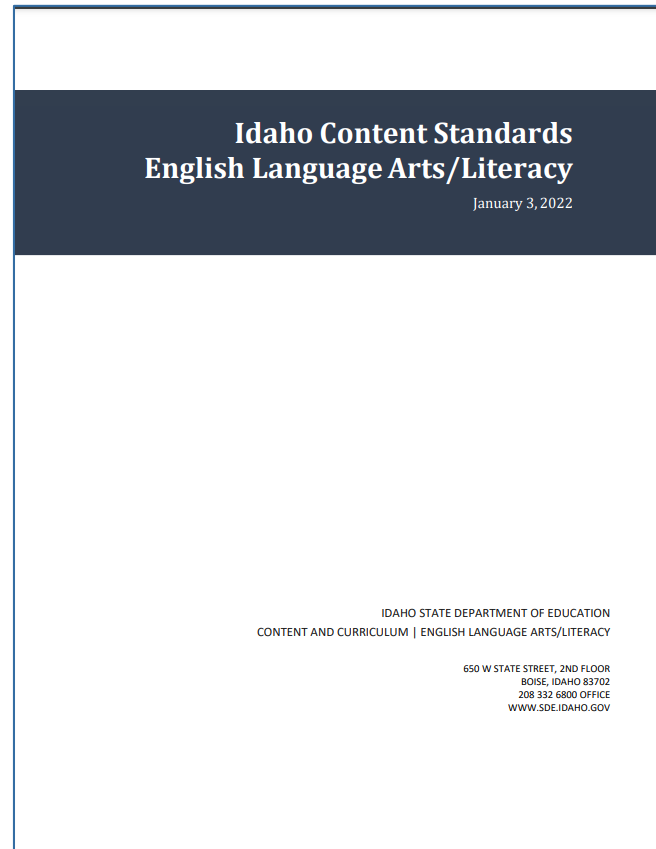
WIDA ELD Standards

Standard 1 – Social & Instructional Language

» English language learners communicate for **Social and Instructional** purposes within the school setting.

Standard 2 – Language of Language Arts

» English language learners communicate information, ideas, and concepts necessary for academic success in the content area of **Language Arts.**
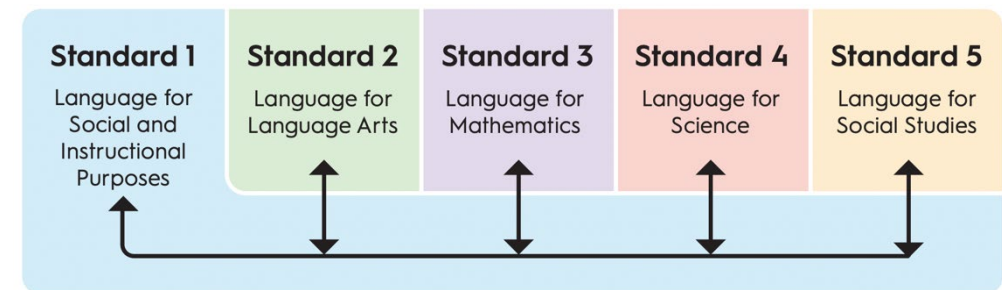
Standard 3 – Language of Mathematics

» English language learners communicate information, ideas, and concepts necessary for academic success in the content area of **Mathematics.**

Standard 4 – Language of Science

» English language learners communicate information, ideas, and concepts necessary for academic success in the content area of **Science.**

Standard 5 – Language of Social Studies

» English language learners communicate information, ideas, and concepts necessary for academic success in the content area of **Social Studies.**

Standard 1	Standard 2	Standard 3	Standard 4	Standard 5
Language for Social and Instructional Purposes	Language for Language Arts	Language for Mathematics	Language for Science	Language for Social Studies

What Is Academic Language?

Academic language is _____.

To have academic language means that _____.

An example of academic language would be _____.
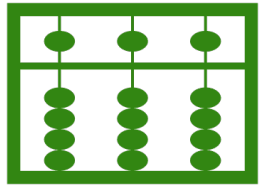
What Is Academic Language?

" *Academic language is the set of words, grammar, and organizational strategies used to describe complex ideas, higher-order thinking processes, and abstract concepts.*

Building Academic Language: Essential Practices for Content Classrooms J. Zwiers, 2008, p. 20
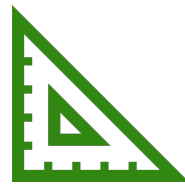
Language in Standards for Mathematical Practice

MP.6 Students attend to precision. Describe solution strategies to mathematical tasks using grade-level appropriate vocabulary.
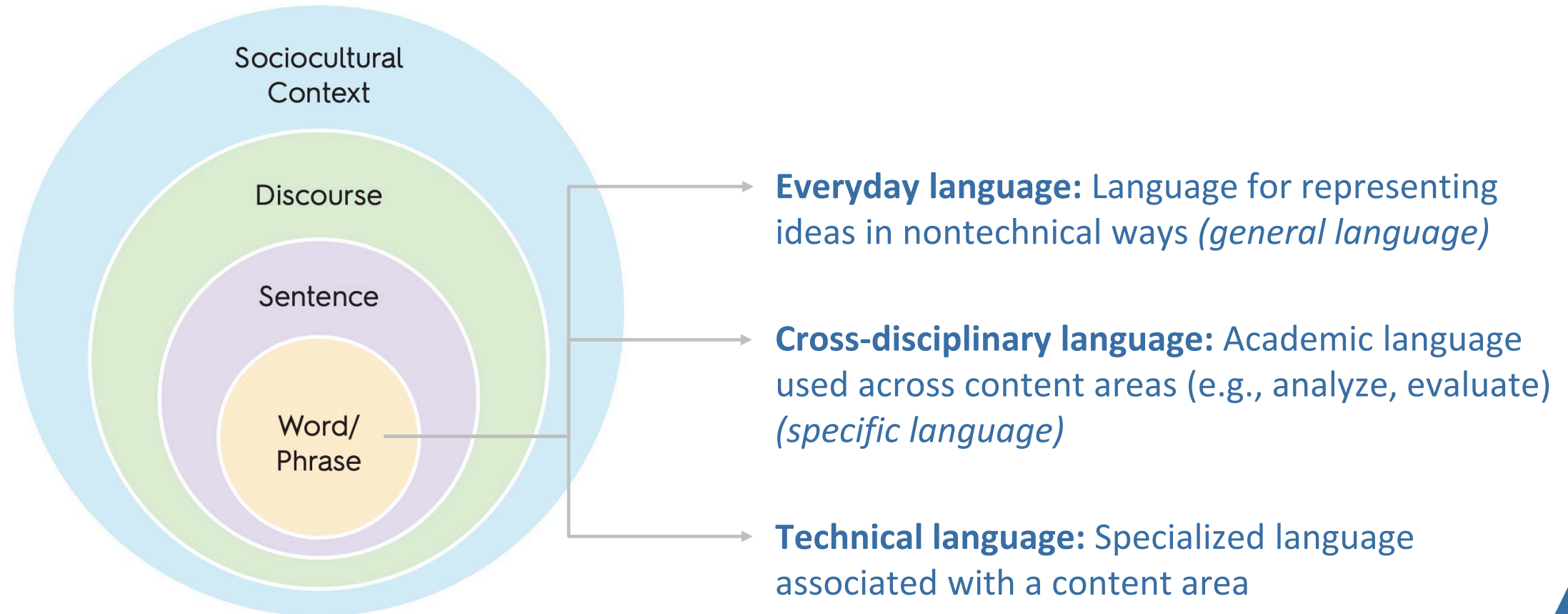
MP.6 Students attend to precision. Develop and refine mathematical communication skills by using clear and precise language in their discussions with others and in their own reasoning.

MP.4 Students model with mathematics. Experiment with representing problem situations in multiple ways, including numbers and words (mathematical language).

Dimensions of Language Use

Everyday language: Language for representing ideas in nontechnical ways *(general language)*

Cross-disciplinary language: Academic language used across content areas (e.g., analyze, evaluate) *(specific language)*

Technical language: Specialized language associated with a content area

WIDA, 2020, p. 32

4 Key Language Uses

>> Reflect the most high-leverage genre families across academic content standards

>> Are present across all grade levels and disciplines
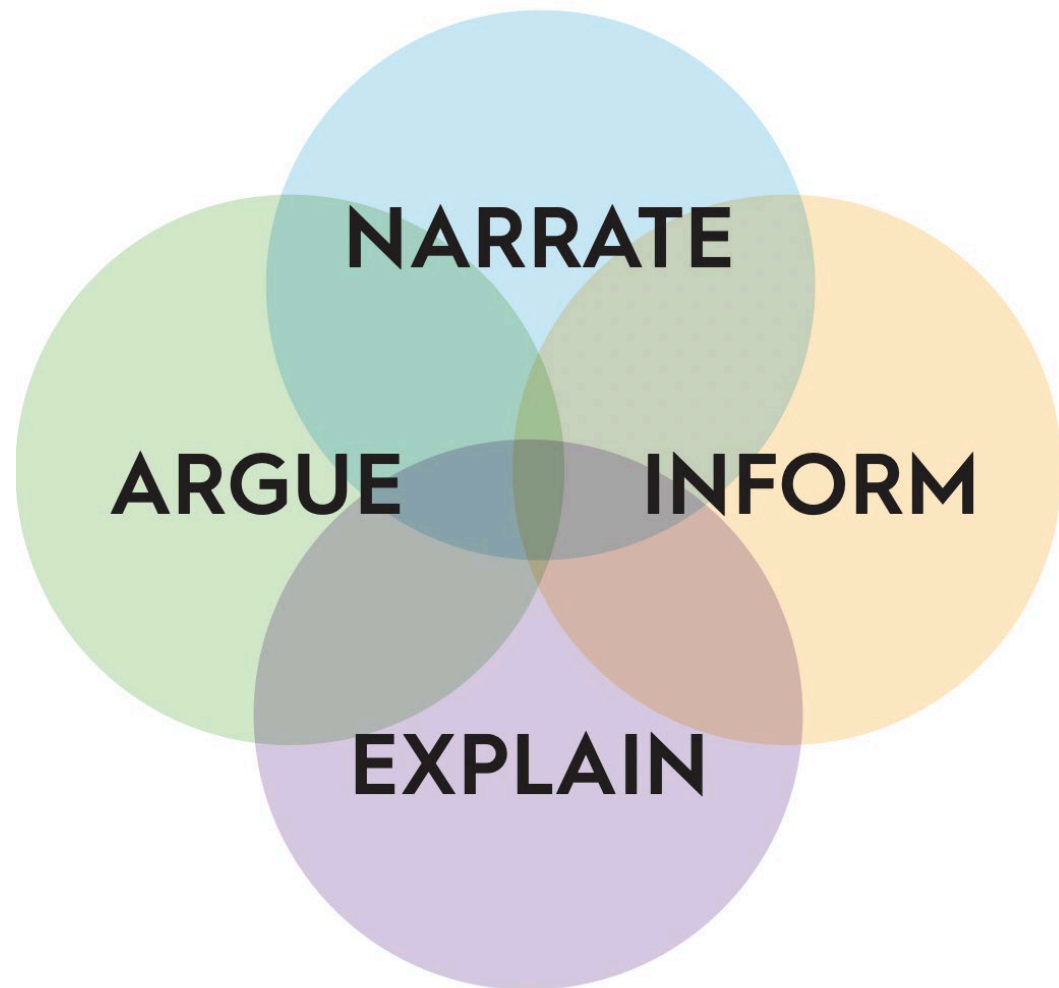
Distribution of Key Language Uses

WIDA ELD Standard	Narrate	Inform	Explain	Argue
Language for Social and Instructional Purposes				
Language for Language Arts				
Language for Mathematics				
Language for Science				
Language for Social Studies				

● 1. Most prominent

◑ 2. Prominent

○ 3. Present

Distribution of Key Language Uses

WIDA ELD Standard	Narrate	Inform	Explain	Argue
1. Language for Social and Instructional Purposes	●	●	●	●
2. Language for Language Arts	●	●	◑	●
3. Language for Mathematics	○	◑	●	●
4. Language for Science	○	◑	●	●
5. Language for Social Studies	◑	○	●	●

WIDA, 2020, p. 290

Distribution of Key Language Uses

WIDA ELD STANDARDS STATEMENTS conceptual framing of language and content integration

KEY LANGUAGE USES prominent language uses across disciplines

LANGUAGE EXPECTATIONS goals for content-driven language learning

PROFICIENCY LEVEL DESCRIPTORS a continuum of language development across six levels

Associated **Language Functions** and **Language Features:** ways students might use language to meet the purposes of schooling
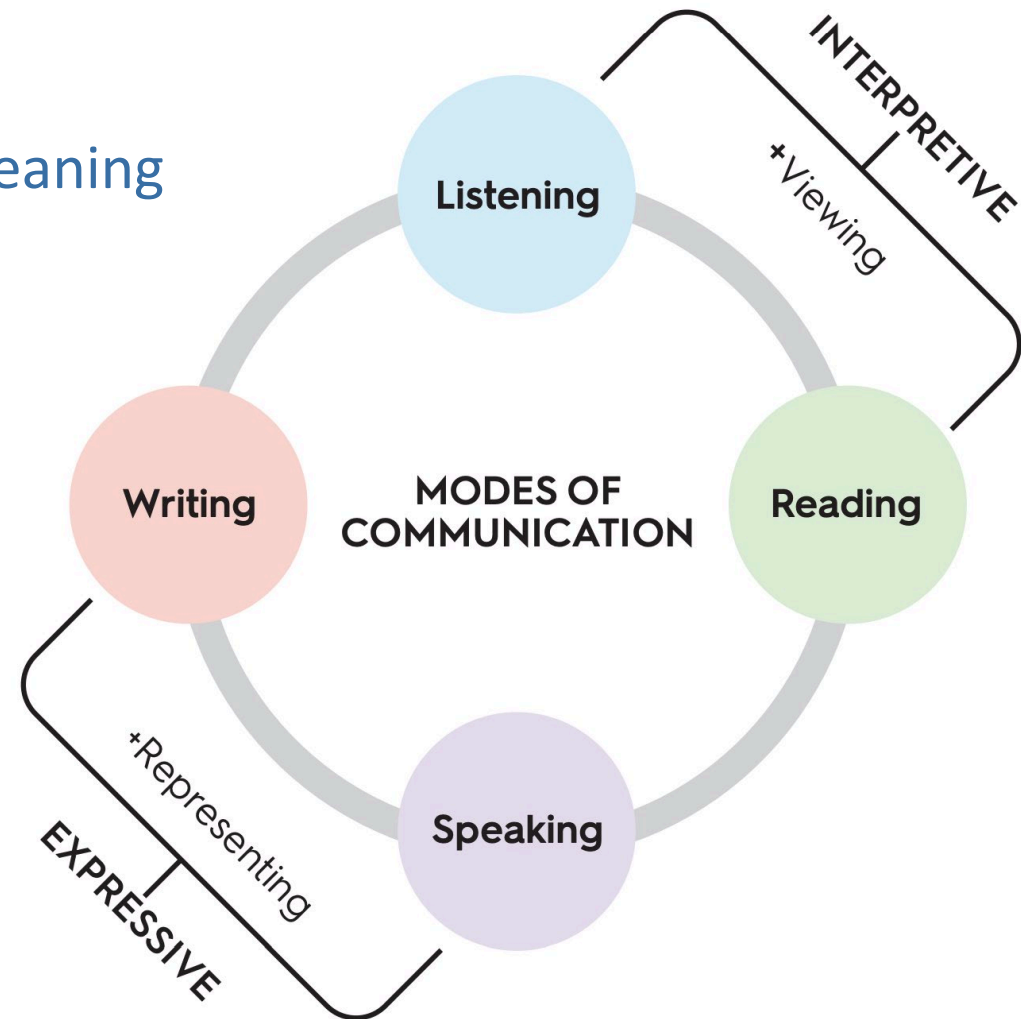
Modes of Communication

>> Provide support for developing language

>> Essential path for all students to make meaning

INTERPRETIVE

+Viewing

Listening

Reading

MODES OF COMMUNICATION

Writing

Speaking

+Representing

EXPRESSIVE

Today's Focus

Improving academic vocabulary
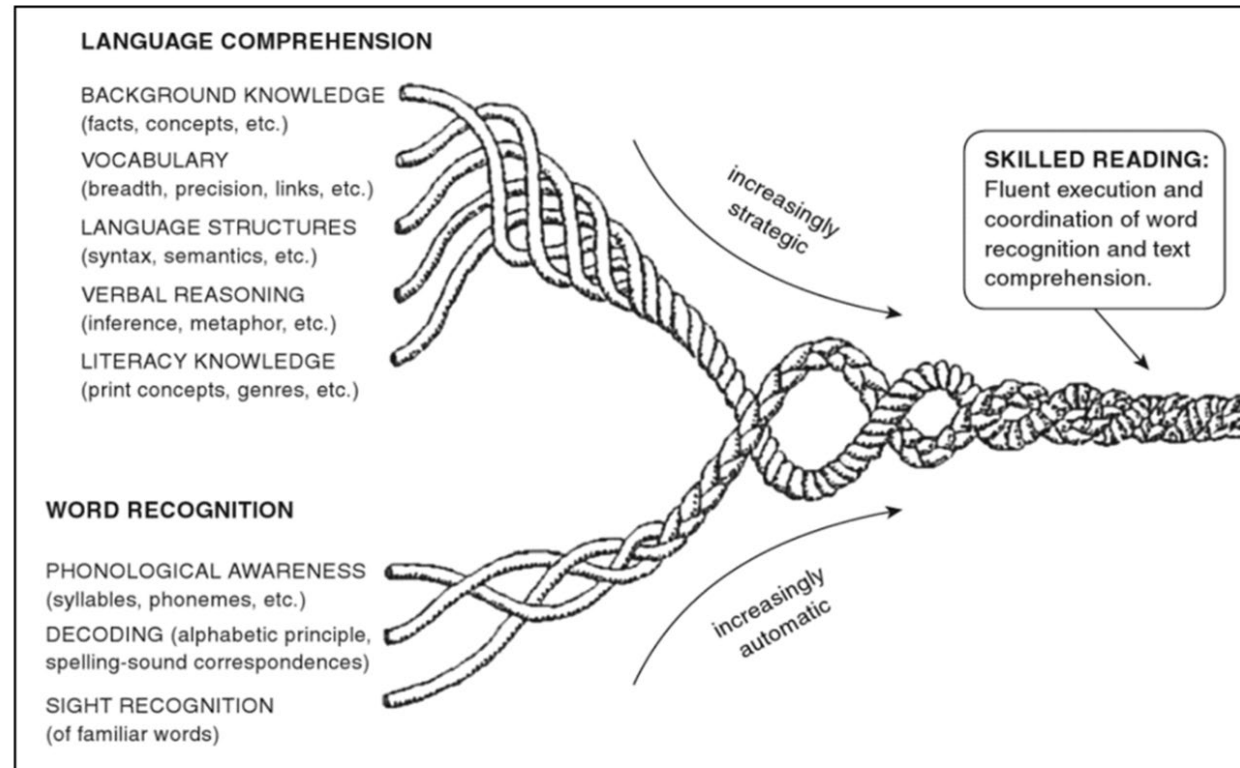
CCNETWORK
Comprehensive Center Network

REGION 17
Idaho
Montana

Skilled Readers

What are some essential components of being a skilled reader?

Scarborough's Reading Rope

Scarborough's Reading Rope

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE
(facts, concepts, etc.)

VOCABULARY
(breadth, precision, links, etc.)

LANGUAGE STRUCTURES
(syntax, semantics, etc.)

VERBAL REASONING
(inference, metaphor, etc.)

LITERACY KNOWLEDGE
(print concepts, genres, etc.)

increasingly strategic

SKILLED READING:
Fluent execution and coordination of word recognition and text comprehension.

WORD RECOGNITION

PHONOLOGICAL AWARENESS
(syllables, phonemes, etc.)

DECODING (alphabetic principle, spelling-sound correspondences)

SIGHT RECOGNITION
(of familiar words)

increasingly automatic

Scarborough, H. (2001 Connecting early language and literacy to later reading (dis)abilities: Evidence, theory and practice. In S. Newman & D. Dickinson (Eds.), Handbook of Early Literacy Research. pp. 97-110. New York, Guilford Press. *(used with permission of the author)*
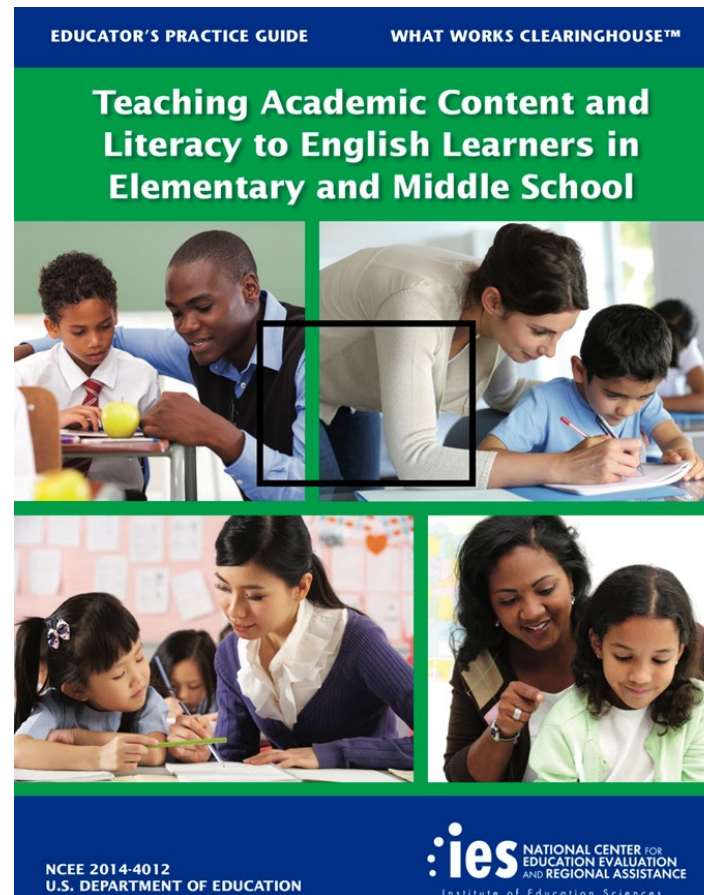
Scarborough, 2002, p. 98

Simple View of Reading (SVR)

Adequate WR Adequate LC	**Poor WR Adequate LC**
Adequate WR Poor LC	**Poor WR Poor LC**

Word recognition (WR): Phonological awareness, decoding and encoding skills

Language comprehension (LC): Skills related to language comprehension

Gough & Tunmer, 1986

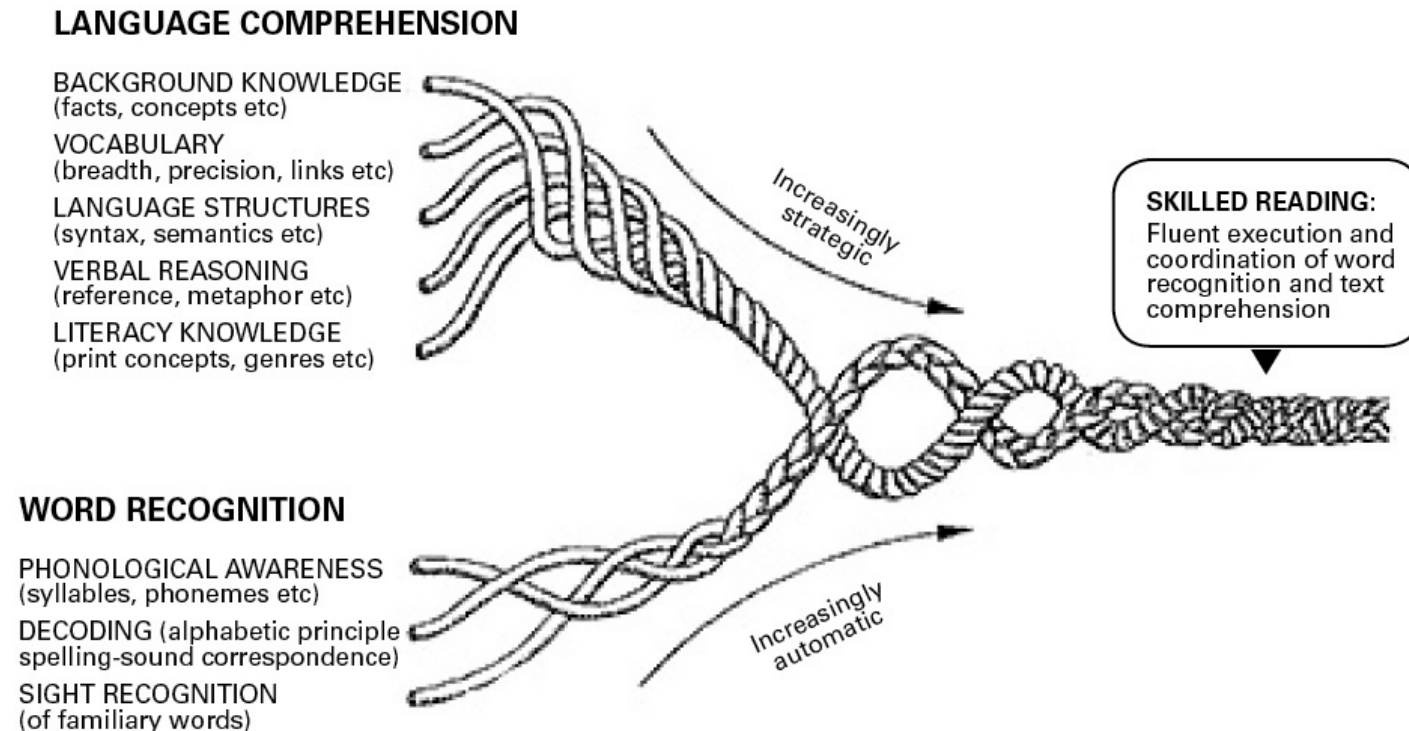# A Collection of the Best Available Evidence

Baker et al., 2014, p. 6

4 Recommendations for Teaching Academic Content and Literacy to English Learners

1. Teach a set of *academic* vocabulary words *intensively* across several days using a *variety of instructional activities*

2. *Integrate oral and written English-language instruction* into content-area teaching

3. Provide *regular, structured opportunities* to develop written language skills

4. Provide *small-group instructional intervention* to students *struggling* in areas of literacy and English-language development

Baker et al., 2014, p. 6

Scarborough's Reading Rope

The Many Strands that are Woven into Skilled Reading
(Scarborough 2001)

LANGUAGE COMPREHENSION

BACKGROUND KNOWLEDGE (facts, concepts etc)
VOCABULARY (breadth, precision, links etc)
LANGUAGE STRUCTURES (syntax, semantics etc)
VERBAL REASONING (reference, metaphor etc)
LITERACY KNOWLEDGE (print concepts, genres etc)

Increasingly strategic

SKILLED READING:
Fluent execution and coordination of word recognition and text comprehension

WORD RECOGNITION

PHONOLOGICAL AWARENESS (syllables, phonemes etc)
DECODING (alphabetic principle spelling-sound correspondence)
SIGHT RECOGNITION (of familiary words)

Increasingly automatic

Scarborough, 2002, p. 98

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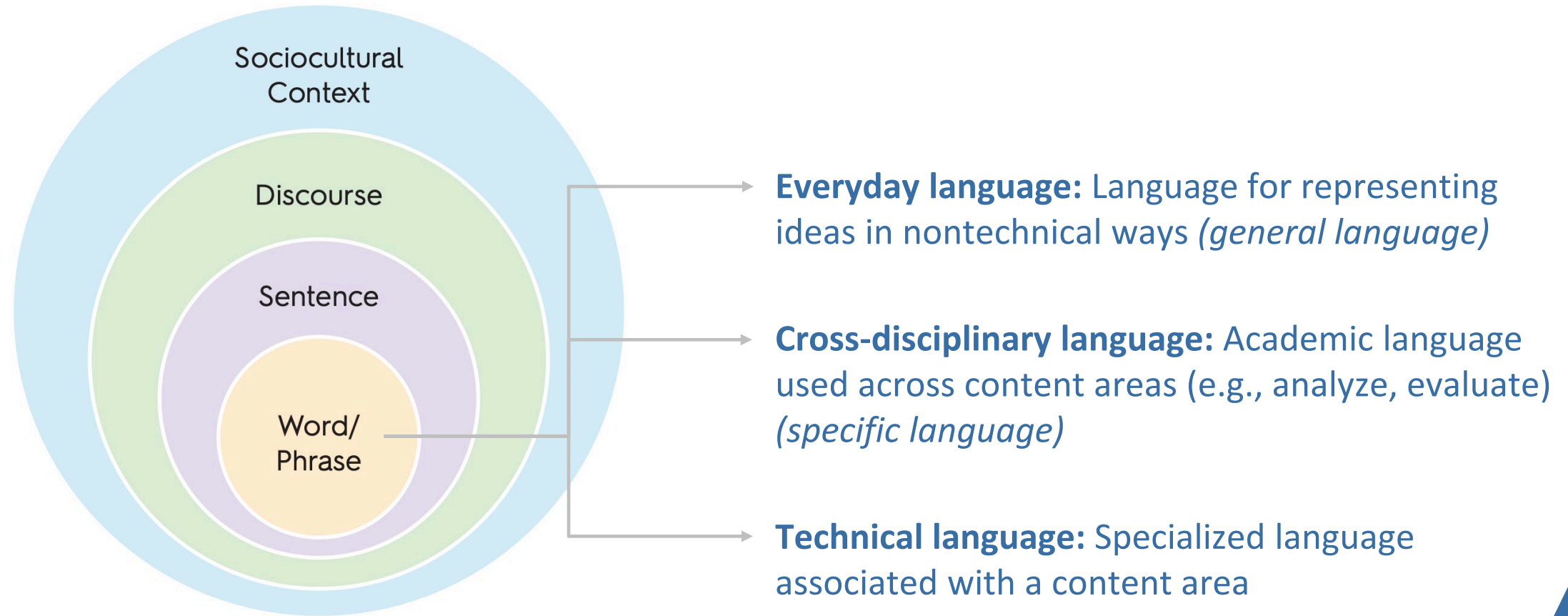
Baker et al., 2014, p. 6

Steps to Implement Recommendation 1

1
- Choose a **brief, engaging piece of text** that includes academic vocabulary

2
- Choose a **small set of academic vocabulary** for in-depth instruction

3
- Teach academic vocabulary in depth using **multiple modalities** (speaking, writing, and listening)

4
- Teach **word-learning strategies** to help students independently figure out the meaning of words

Baker et al., 2014, p. 6

Dimensions of Language Use

Sociocultural Context

Discourse

Sentence

Word/ Phrase

Everyday language: Language for representing ideas in nontechnical ways *(general language)*

Cross-disciplinary language: Academic language used across content areas (e.g., analyze, evaluate) *(specific language)*

Technical language: Specialized language associated with a content area

Gottlieb et al., 2012, p. 5

Academic Vocabulary Categories

General	Domain-Specific
• Environment • Factor • Exhibit • Investigate • Factor • Transition	**Mathematics** • Pi • Communicative **Science** • Photosynthesis • Atom • Diode

Brief Engaging Text

When you walk into a zoo today, the exhibits look different than they used to look years ago. Before the 1960s, zoos had cages with tile walls and floors. Now, animals in zoos live in more natural environments. For example, instead of enormous gorillas pacing back and forth in cramped cement areas, they play on soft grass and nap in trees. Before, large birds lived in small cages. Now, zoos have large exhibits where birds can stretch their wings and soar from tree to tree. According to zoo design expert Jon C. Coe, these changes often have a positive impact on animals' health and happiness.

Still, creating better living spaces is just one step toward improving the lives of animals that live in zoos. Even in exhibits that look like their natural environments, animals can become bored. According to Coe, boredom can have harmful effects.

"An exhibit may look great, but it isn't doing much for the animal unless it also involves a choice of things to do all day," said Coe. Animals need to be challenged with activities such as looking for food and exploring their surroundings. In fact, some research has shown that giving zoo animals more options and activities promotes good health and lowers the incidence of violent behavior. Today, several zoos have created living environments for their animals that involve the kinds of pursuits that Coe described. For instance, the orangutans at the National Zoo in Washington, DC can travel across the zoo on overhead ropes to visit friends.

Coe recommends more investigation into these types of zoo exhibits and their impact on animal health. With this new pursuit of creating more natural environments in zoo exhibits, he sees a happier and healthier future for many zoo animals.

Baker et al., 2014, p. 15

Brief Engaging Text

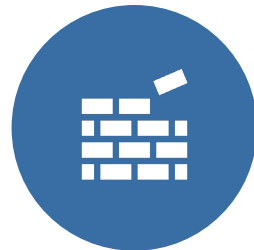Words central to understanding the text

Words frequently used in text
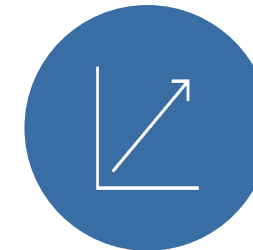
Words that might appear in other content areas

Words with multiple meanings

Words with affixes

Cross-language potential

Baker et al., 2014, p. 15

Academic Vocabulary Categories

Brief Routine	Expanded Routine
- Show the word, say the word, have students repeat the word - Present definition, provide alternate definition in student-friendly language if necessary - Say the word again and have students repeat the word	- Present new word - Show students the word - Read the word aloud - Students repeat the word aloud - Present a student-friendly definition - Discuss with students "what is known about the word" - Present students with example sentences/examples/non-examples of the word - Provide students with a demonstration, object, or picture that represents the word - Engage in deep processing of the word - Offer multiple exposures during instruction

Beck, McKeown, & Kucan, 2013
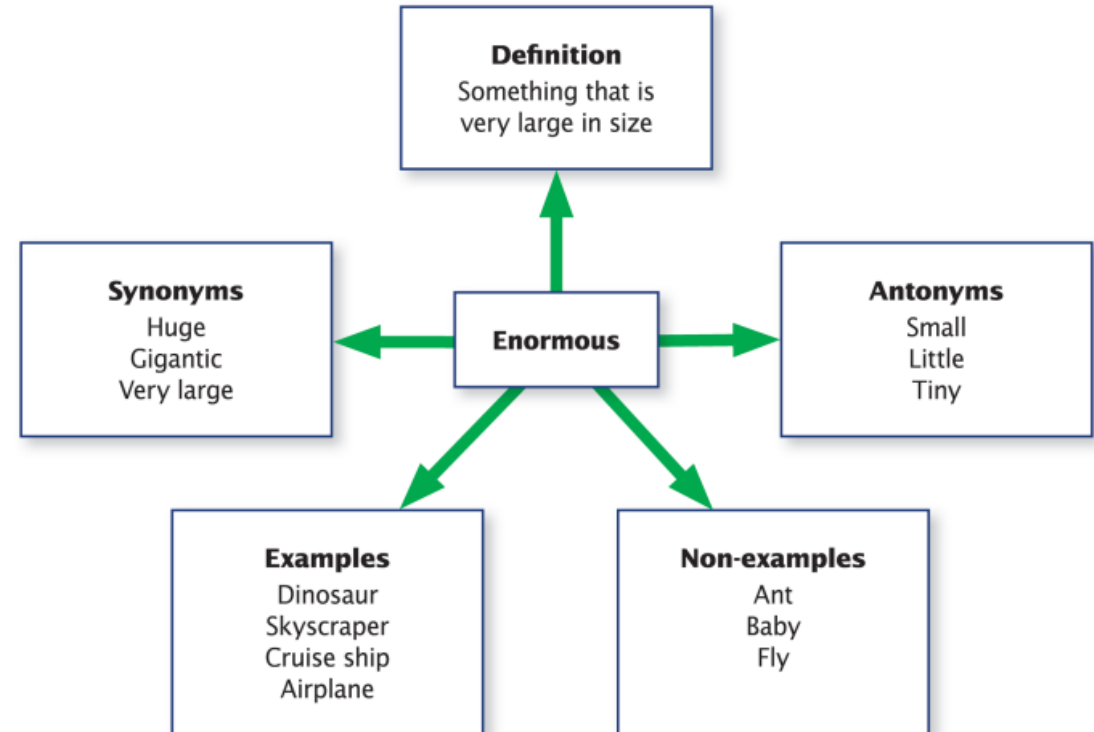
Academic Vocabulary Categories

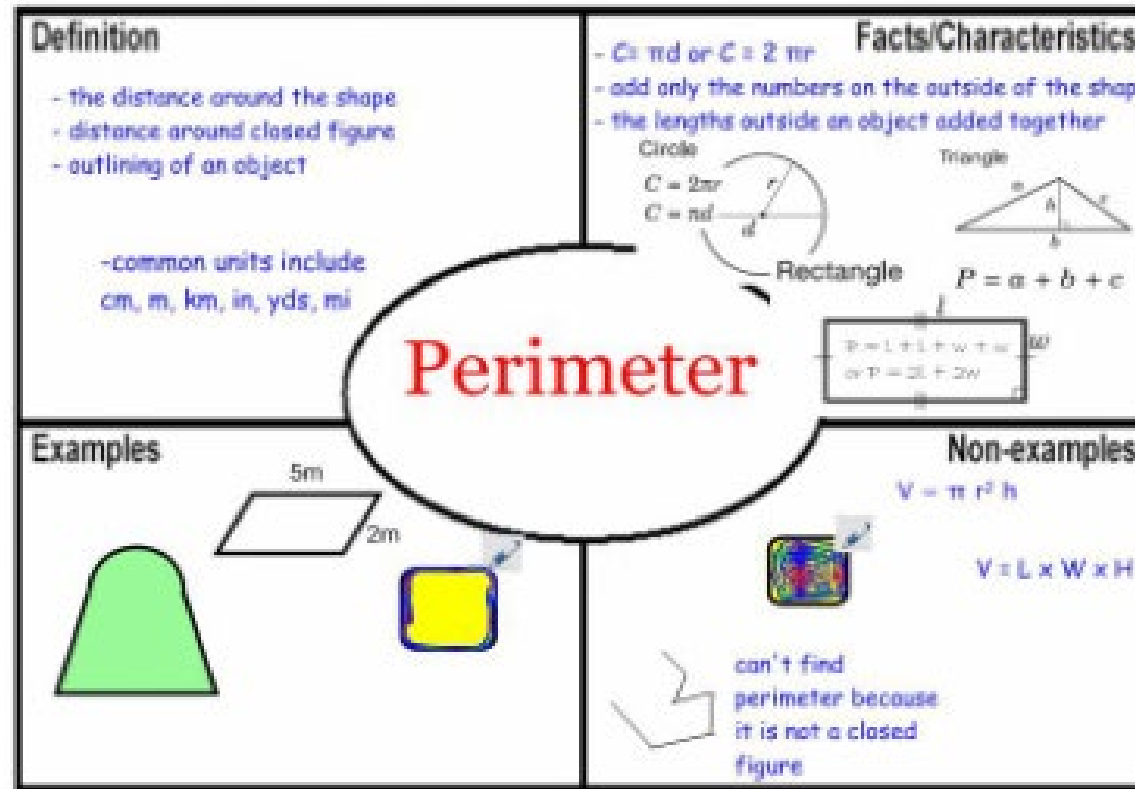| Student-Friendly Definition	Traditional Definition
A writer retelling events that occurred during their life	A historical account or biography written from personal knowledge or special sources

Activities for Explicit Instruction

>> Define (student-friendly)

>> Reinforce: Example, non-example, concrete representation, visual representation (or "realia")

>> Extend (repetition)

Exhibit 1.4. Word map

Definition
Something that is very large in size

Synonyms
Huge
Gigantic
Very large

Enormous

Antonyms
Small
Little
Tiny

Examples
Dinosaur
Skyscraper
Cruise ship
Airplane

Non-examples
Ant
Baby
Fly

Baker et al., 2014, p. 6

Instructional Routine: Example

Instructional Routine: Example

Frayer Model Examples – Guess the word/concept

Definition: A change in size, shape or state of matter where the composition of the substance does not change	**Facts/Characteristics:** New materials are not formed. Same materials are present before and after change.
Examples: Melting ice Cutting hair Dissolving sugar	**Non Examples:** Burning wood Baking a cake Baking soda with vinegar (carbon dioxide is produced)

?

(Source: Using Literacy Strategies in Mathematics and Science Learning in *Adolescent Literacy in Perspective*, 2009)

Most Frequent Prefixes

Prefix	Meaning	Example	ELA	Math	Social Studies	Science
anti-	against	antiwar				
de-	not, opposite	deactivate				
dis-	not, opposite of	disagree				
en-, em-	cause to	encode, embrace				
fore-	before	forecast				
in-, im	in, on	inhabit, imprint				
in-, im-, il-, ir,-	not	injustice, impossible				
inter-	between	interact				
mid-	middle	midsize				
mis-	wrong	misfire				

White, Sowell, & Yanagihara, 1989

Most Frequent Prefixes

Prefix	Meaning	Example	ELA	Math	Social Studies	Science
non-	not	nonessential				
over-	too much	overrun				
pre-	before	prehistoric				
re-	back, again	return, redesign				
semi-	half	semicircle				
sub-	under	submarine				
super-	above	superstar				
un-	not	unhappy				
under-	below	undersea				

White, Sowell, & Yanagihara, 1989

Most Frequent Suffixes

Suffix	Meaning	Examples	ELA	Math	Science	Social Studies
-able, -ible	can be done	comfortable				
-al, -ial	having characteristic of	personal				
-ed	past tense verb	divided				
-en	made of	wooden				
-er	comparative	greater				
-er, -or	one who	worker, doctor				
-est	comparative	greatest				
-ful	full of	careful				
-ic	having characteristic of	linguistic				
-ing	present participle	figuring				
-ion, -tion, -ation, -ition	act, process	subtraction, radiation				

Most Frequent Suffixes

Suffix	Meaning	Examples	ELA	Math	Science	Social Studies
-ive, -ative, -itve	adjective form of noun	plaintive, communicative				
-ity, -ty	state of	infinity				
-less	without	fearless				
-ly	characteristic of	quickly				
-ment	action or process	establishment				
-ness	state of, condition of	kindness				
-ous, -eous, -ious	possessing the qualities of	poisonous				
-s, -es	more than one	boxes, toys				
-y	characterized of	snappy				

White, Sowell, & Yanagihara, 1989

14 Valuable Morphemes: Root Words

» cept

» duct

» fact

» fer

» graph

» mit

» ology

» plic

» pos

» scrib

» sist

» spect

» tend

» tent

Henry, 1990

Morpheme Trees

Modes of Communication

Teaching vocabulary in depth requires using multiple modes of communication

WIDA, 2020, p. 29
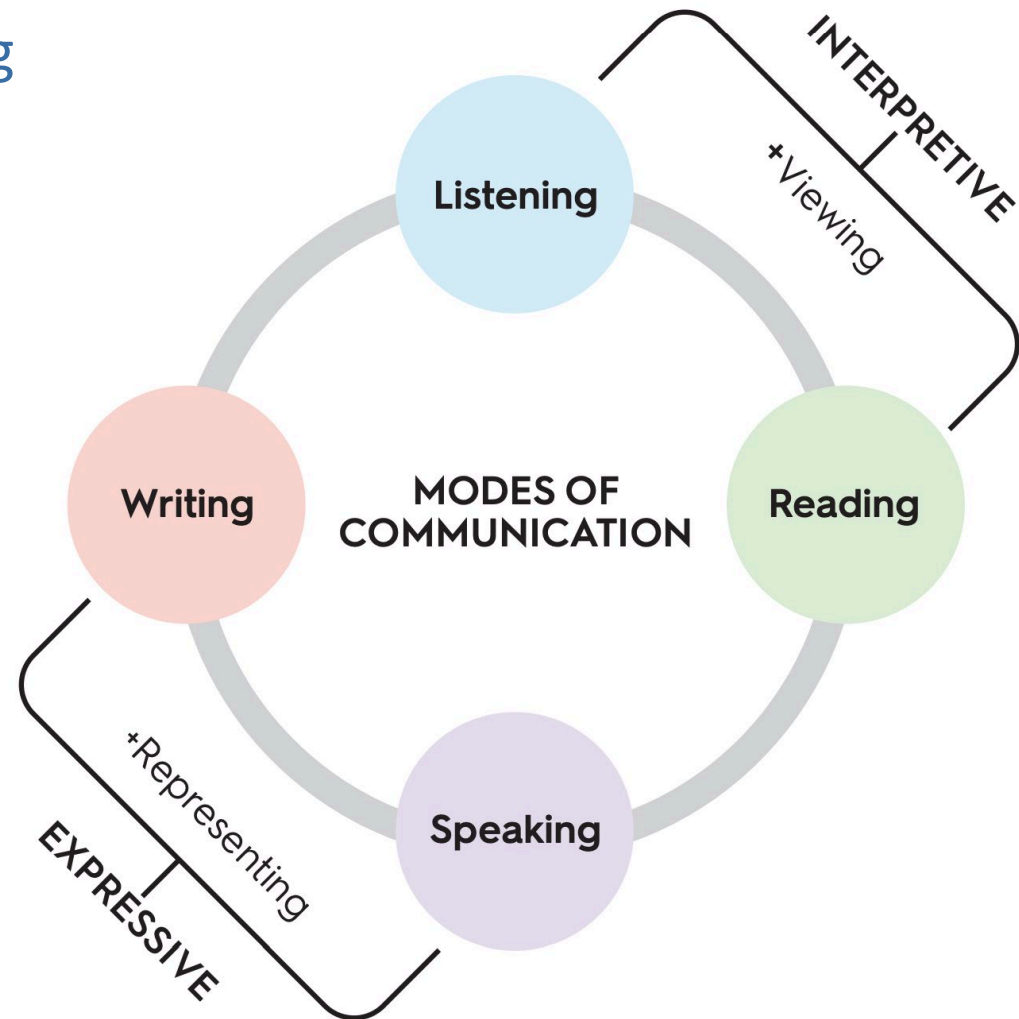
Modalities: Brick and Mortar

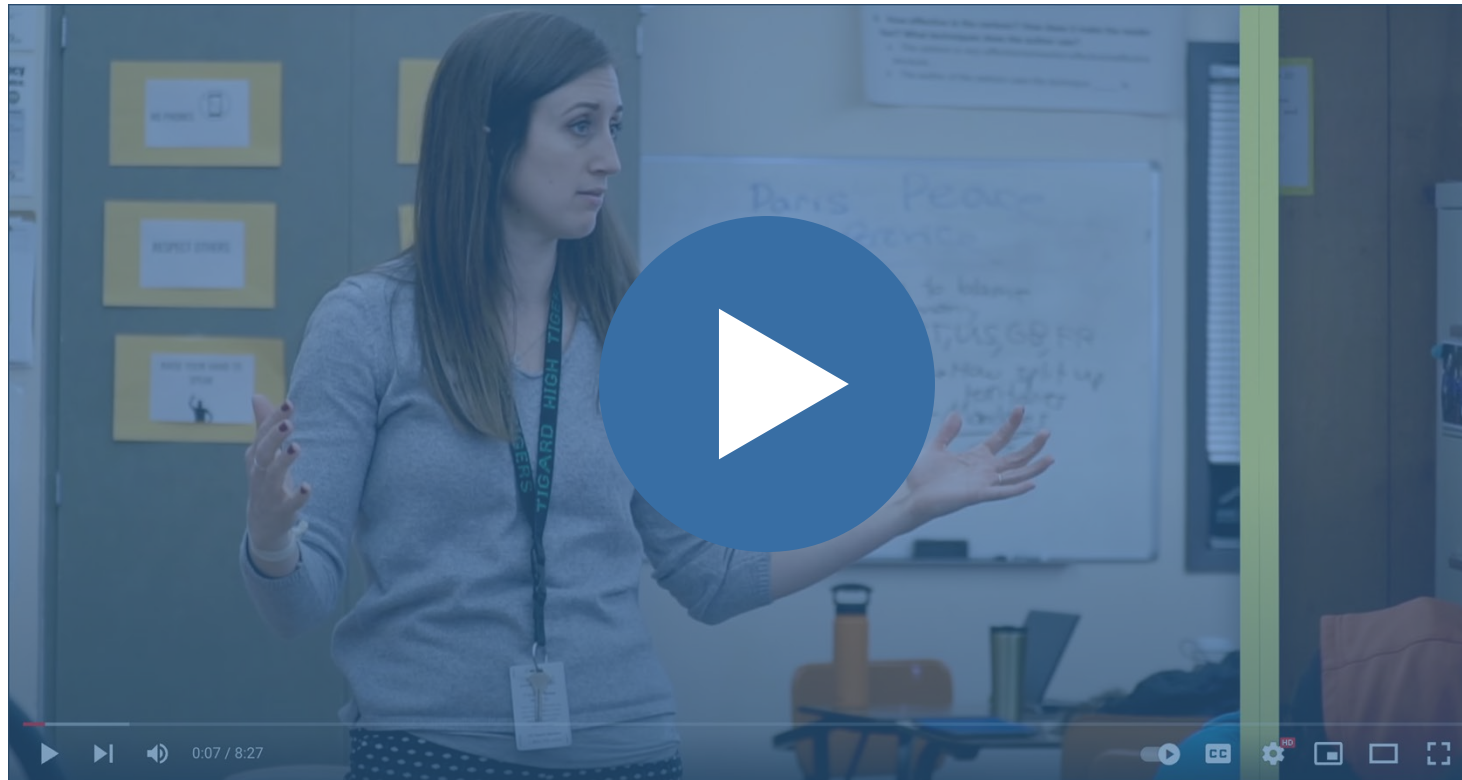Brick: Topic, specific vocabulary

What we are talking about

Mortar: Teaching

How we are talking about it

*It takes **both** to generate language*

Dutro & Levy, 2013, p. 5.31

Summative Video

Reflections: Think, Write, Share

What information was new? What was a good reminder?

What implication does this information have for your classroom?

What is one thing you would like to try with your students?

How might you use this information when planning for a lesson?

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Questions

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