DOCUMENT RESUME

ED 464 374 CS 511 134

TITLE Oral Language & Vocabulary Development: Grades 2-3. Alabama

Reading Initiative.

INSTITUTION Alabama State Dept. of Education, Montgomery.

PUB DATE 2001-00-00

NOTE 52p.

AVAILABLE FROM Alabama Reading Initiative, Alabama Department of Education,

P.O. Box 302101, Montgomery AL 36130-2101. Tel: 334-353-1389. For full text: http://www.alsde.edu.

PUB TYPE Guides - Classroom - Teacher (052)

EDRS PRICE MF01/PC03 Plus Postage.

DESCRIPTORS Grade 2; Grade 3; Higher Education; Inservice Teacher

Education; *Oral Language; Primary Education; Professional Development; *Reading Comprehension; *Reading Improvement;

Teaching Methods; *Vocabulary Development

IDENTIFIERS Alabama Reading Initiative

ABSTRACT

This inservice professional development module, part of the Alabama Reading Initiative, presents research summaries, notes for presenters, and activities. The Oral Language and Vocabulary module elaborates on a student's comprehension of text as it relates to the overlap between the student's system of language and the author's system of language. Knowing that the language used in children's books is 10 times more complex than the conversation of college graduates, this module shows how students need "authentic" occasions (e.g., book talks, drama) in which they practice the more "formal" language (e.g., vocabulary and structures) used in books. Sections of the module, and associated objectives, are: (1) "Research Base for Oral Language and Vocabulary Development" (examine and discuss research-based quotes about oral language and vocabulary development; examine and discuss the stages of oral language development; discuss the instructional implications of the stages of oral language development and condition for learning language); (2) "Components of Oral Language and Vocabulary Development" (become familiar with five components of oral language/vocabulary development; reflect upon how the components of oral language/vocabulary development specifically relate to classroom instruction); and (3) "Practical Application" (examine the main things about oral language/vocabulary development; participate in activities that expand their own oral language and vocabulary; engage in activities designed to promote students' oral language and vocabulary development; and reflect on specific ways the instructional tools can be used to develop students' oral language and vocabulary). An appendix contains a list of prefixes, suffixes, and roots; hints, helps, and expectations for students with limited English proficiency; additional activities to develop oral language; a discussion of literature circles; a list of 100 picture books everyone should know; and a 45-item list of related research. (RS)



Oral Language & & Vocabulary Development

Grades 2-3



PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

1. E. Ingvam, V

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

U.S. DEPARTMENT OF EDUCATION Office of Educational Research and Improvement EDUCATIONAL RESOURCES INFORMATION CENTER (EDIC)

- CENTER (ERIC)

 This document has been reproduced as received from the person or organization originating it.
- Minor changes have been made to improve reproduction quality.
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

Alabama Reading Initiative (Version: 2001)

er:	
er:	



TABLE OF CONTENTS & OBJECTIVES

Section 1: RESEARCH BASE FOR ORAL LANGUAGE AND VOCABULARY DEVELOPMENT

Participants will:

- 1. Examine and discuss research-based quotes about oral language and vocabulary development.
- 2. Examine and discuss the stages of oral language development.
- 3. Discuss the instructional implications of the stages of oral language development and conditions for learning language.

Section 2: COMPONENTS OF ORAL LANGUAGE AND VOCABULARY DEVELOPMENT

Participants will:

- 1. Become familiar with five components of oral language/vocabulary development; phonological awareness, morphemes, syntax, semantics, and pragmatics.
- 2. Reflect upon how the components of oral language/vocabulary development specifically relate to classroom instruction.

Section 3: PRACTICAL APPLICATION

Participants will:

- 1. Examine the main things about oral language/vocabulary development.
- 2. Participate in activities that expand their own oral language and vocabulary.
- 3. Engage in activities designed to promote students' oral language and vocabulary development.
- 4. Reflect on specific ways the instructional tools can be used to develop students' oral language and vocabulary.

Appendix



Oral Language and Vocabulary Development

What The Research Says

The ...child's language development is vital to his progress in reading. We are concerned not only with the development of his vocabulary, or his articulation of sounds, but with the range and flexibility of the patterns of sentences which he is able to control....Children need to be engaged in conversations about the things they know about, because familiar content provides them with opportunities to experiment in ways of expressing themselves.

Clay, 1991

A basic appreciation of the phonological structure of spoken words appears to be necessary for a child to understand how print represents the sounds of the language.

Ehri & Wilce, 1980; Perfetti et al., 1987 (in Phonemic Awareness and Phonics Module)

Reading instruction builds especially on oral language. If this foundation is weak, progress in reading will be slow and uncertain.

Anderson, Hiebert, Scott, & Wilkinson, 1985

People who say cuz, watchamacallit, jeet, and gonna must learn to recognize their counterparts in written language as because, what you may call it, did you eat, and going to. The oral forms are not sloppy renditions of the written forms, they are different forms representing the same meanings. Each reader must learn the set of relationships that exists between his or her oral language and its written counterparts: the phonics of language. The relationships are not the same for all speakers because of differences in dialects, as well as idiosyncratic differences.

4

Goodman, Watson, & Burke, 1996



Stages of Language Development for Expressive Oral Language

- Stage 1: Random Children begin vocalizing sounds, cooing, gurgling, babbling, and experimenting with production of phonemes, which are the smallest units of sound in spoken language. These random vocalizations come to include commonly heard intonation patterns and repeated consonant-vowel links that children will arrange and control much later in complex, whole-word sequences such as "bombard."
- Stage 2: Unitary Children produce deliberate units of language that are often limited to one syllable or single words and used to convey different whole thoughts, requests, or commands., For example, "cookie" may mean "There's a cookie." or I want a cookie." or "Give me a cookie no!"
- Stage 3: Expansion and Delimiting Children expand one-, two-syllable utterance in ways that begin to differentiate between meanings and approximate word orders in adult language structures. Examples might be found in shifts from "Cookie!" to expressing different meanings in different phrases such as "look cookie!" and "Gimmee cookie." Many phrases continue to serve several purposes, however, and "Mommy play!" may mean "Mommy is playing." or I want Mommy to play."
- Stage 4: Structural Awareness Children begin to use more complex patterns and word orders in speech and then generalize them or over-generalize them, often in unconventional ways. These patterns include plurals, verb forms, pronouns, etc. and productions such as "Mens wear pants." and I goed."
- Stage 5: Automatic Usage Children generate a large number of grammatical sentences from knowledge of grammatical rules and patterns that have been heard and internalized through usage, but they do not know why. Examples of automatic usage are found in the speech of kindergarten-age children who can produce sentences such as "She goes to school." or "Yesterday we went to town." and "He's already gone." but have no idea why these different verb forms are used.
- Stage 6: Creative Usage— Children combine and recombine words, phrases, structures to invent personal language that expresses needs of the child and communicates with peers and family. Productions may be trite and funny such as "The mayor has keys to the city. Where's his house with the doors to the city?"



The Conditions of Learning: A Model of Learning as it Applies to Literacy

From Brian Cambourne (Nov., 1995) Toward an educationally relevant theory of literacy learning: Twenty years of inquiry. *The Reading Teacher.* Vol. 49, No.3.

- Immersion. Students need to be immersed in a wide variety of literature that they find interesting and use these books for reading and writing instruction.
- **Demonstration.** Students need to receive many demonstrations and models of how texts are constructed and used.
- Expectation. Students are supported or thwarted by the expectations of "those who [they] regard as significant and who hold high expectations for [them];" i.e., parents, teachers, and classmates.
- Responsibility. Students need to be empowered to make their own decisions about what they read and when and how they respond.
- Use. Students need time and opportunity to read literature, extend their reading, share their reading with genuine audiences, and participate in other authentic literacy-related activities.
- **Approximation**. Students must be free to approximate the desired model; trial and error is essential for learning to occur.
- **Response**. Students must receive feedback from others more knowledgeable. Feedback must be relevant, appropriate, timely, readily available, and non-threatening.
- **ENGAGEMENT.** The key to learning is engagement with language and literacy learning.
 - If they believe they are able to learn.
 - If they believe the knowledge or skills are purposeful.
 - If they are free from anxiety
 - If they like, respect, trust the more knowledgeable other.



Instructional Implications of the Stages of Language Development and Cambourne's Conditions for Language Learning

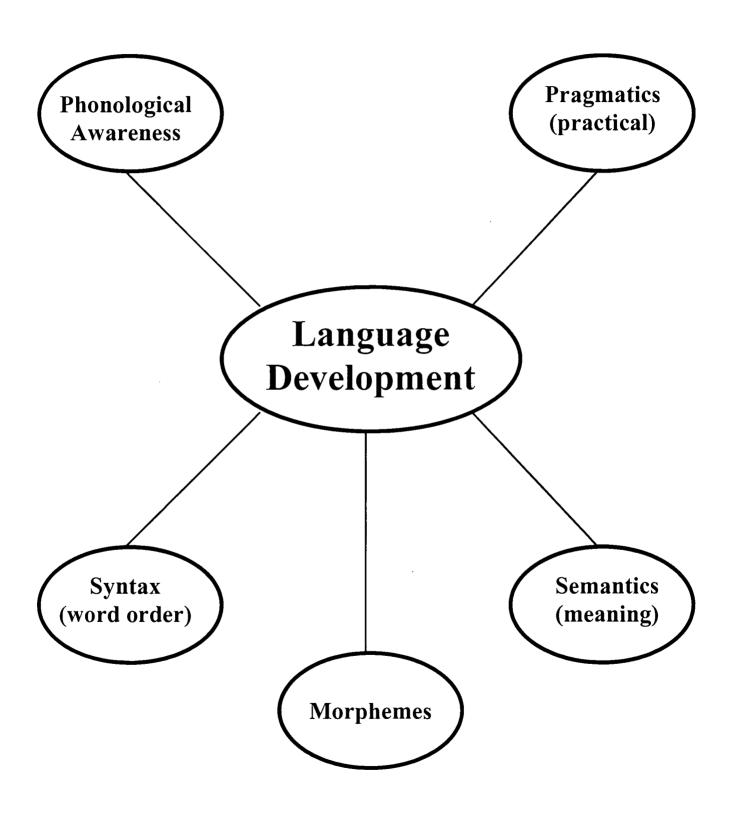
For each of the stages of oral language (on page 2) that characterize students' speech at the grade(s) you teach, list several instructional activities and features of classroom environments that will engage students in Cambourne's conditions of learning (page 3 and below) and promote their development to subsequent stages of oral and written expression.

ession.	ents in Cambourne's conditions of learning (page 3 and below) and note their development to subsequent stages of oral and written
	ression.

- 2. Demonstration
- 3. Expectation
- 4. Responsibility
- 5. Use
- 6. Approximations
- 7. Response & Feedback



COMPONENTS OF LANGUAGE DEVELOPMENT





Corandic Passage

Corandic is an emurient grof with many fribs: it granks from corite, al olg which cargs like lange. Corite grinkles several other tarances, which grakers excarp by glarcking the corite and straping it in tranker-clarped storbs. The tarances strap a chark which is exparged with worters, branking a slorp.

- 1. What is corandic?
- 2. What does corandic grank from?
- 3. What is corite?
- 4. How do grakers excarp the tarances from the corite?

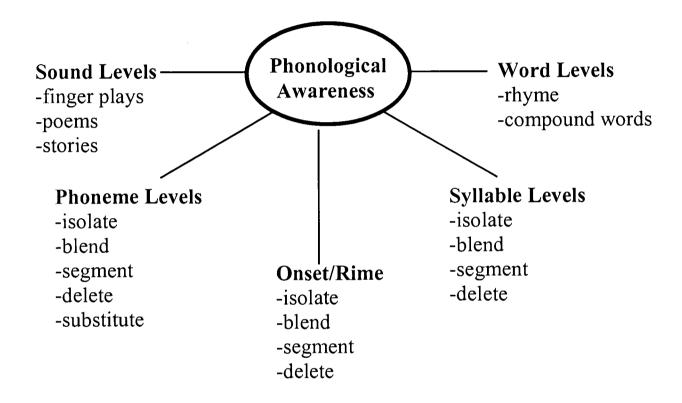
Presenter Notes: Ask participants to close their modules. Do this passage as a read-aloud and have participants listen to the questions below the passage. Re-read the passage and have participants listen for answers to the questions during this second reading (and "jot down" sounds and words if they want). After the passage is reread and questions repeated, answer each question. Discuss which components of oral language were used to answer the questions. Suggestion: Use children's books written in dialect for literature discussion groups in which participants find examples to illustrate the components of language detailed on the following pages (8-12).

9



Phonological Awareness

Phonological Awareness is the awareness of speech sounds including spoken words, syllables, onsets/rimes, and phonemes.



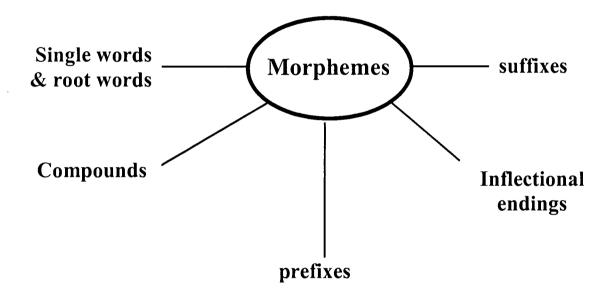
Phonological Awareness is relevant to Oral Language and Vocabulary Development because children use sounds to communicate.

Presenters Notes: The focus of this discussion will differ depending on grade level. This page is intended to be a short review of the Phonemic Awareness/Phonics module for teachers of grades K-3 and an introduction to phonological awareness as a component of language development for teachers in upper elementary, middle school and high school.



Morphemes

Morphemes are the smallest units of meaning in our language.



Morphemes are relevant to Oral Language and Vocabulary Development because they possess meaning.

Presenters Notes: Point out that teachers frequently spend time "teaching" common prefixes and suffixes, but these lists are short compared to the list of commonly used root work. Also point out that students who learn the meanings of common Latin and Greek prefixes, suffixes, AND root words can unlock the meaning of 80% of the words in the English language. Check the lists of common prefixes, suffixes, and roots in the Appendix. Which list is longest? Which type of morphemes should receive the most instructional time and focus?

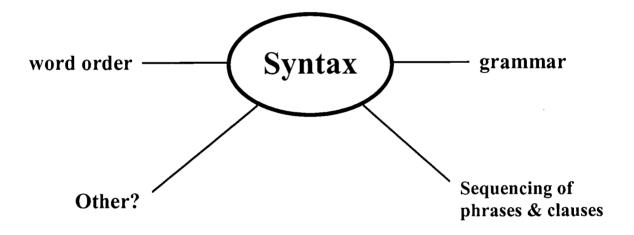


Syntax

Syntax is the sequencing of words to convey meaning.

The building falls on the man./The man falls on the building.

Is it lunchtime. /It is lunchtime.



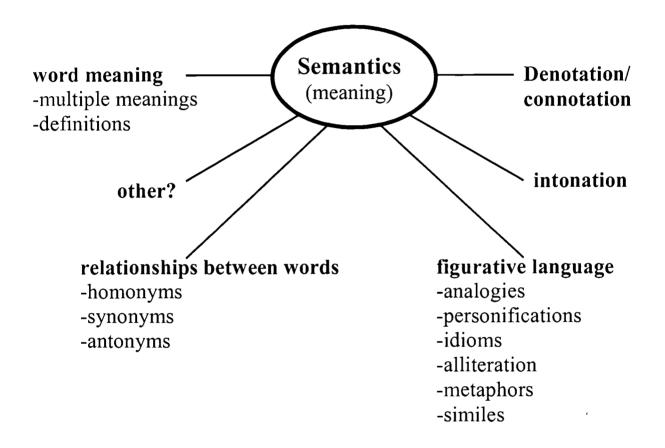
Syntax is relevant to Oral Language and Vocabulary Development because word order and word choice affect meaning.

Presenters' Notes: Discuss the use of syntax (correct and incorrect) and its effect on listeners' perceptions and impressions of the speaker.



Semantics

Semantics is the meaning expressed in language.



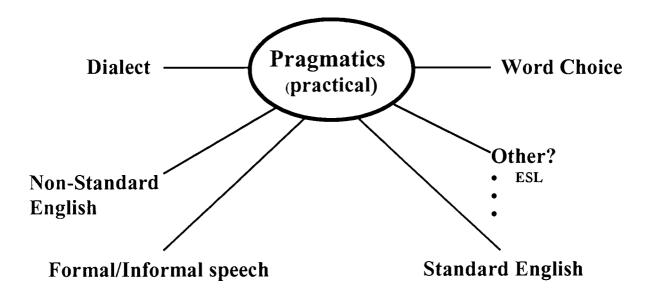
Semantics is relevant to Oral Language and Vocabulary Development because meaning is the main thing.

Presenters Notes: Discuss the use of semantics and its effect on communication and language. Encourage participants to add ways to express meaning to the diagram above.



Pragmatics

Pragmatics is the practical use of language and results often in "code-switching" from one type of speech to another depending on purposes and audiences.



Pragmatics is relevant to Oral Language and Vocabulary Development because it encompasses all the other components.

Presenters Notes: Discuss pragmatics and its effect on communication and language. Encourage participants to add ways to select language for practical use and expressions of meanings to the diagram above.

Make connections between each component of language to pragmatics.

- -Phonological: "aks" for "ask "is dialect difference in sequencing phonemes.
- -Syntax: "she gone" Non-Standard English.
- -Morpheme: "He walked quietly." Standard English.
- -Semantics: "chop"/"dice" have subtle difference in meaning that influence word choice.



The Main Things About Oral Language Development

- 1. The systems of language and meaning develop in mutually supportive ways.
- 2. Oral language development is a critical piece of reading comprehension instruction.
- 3. The system of language comes alive and develops through use as learners build meaning.

Sketch (resketch)

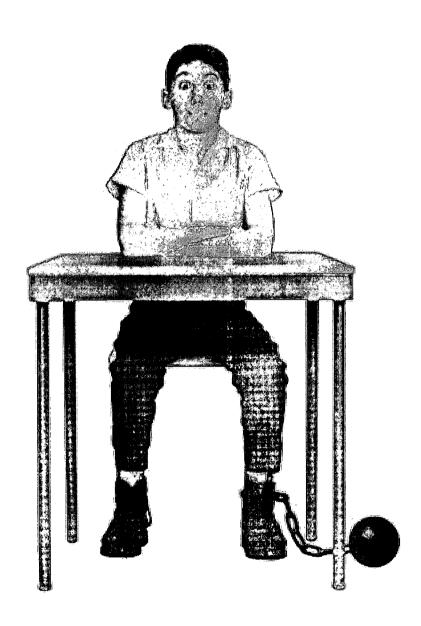
- In small groups, sketch your understanding of one main thing.
- Explain your sketch to the whole group.
- Ask the group what they liked about your sketch (what was important to them).
- Post your sketch under the main thing that it illustrates.

Notes to Presenters:

- Put 1-3 above on sentence strips. Make 3-5 sets.
- Post the main things for continuous reference throughout the day.
- Provide large paper and markers for sketching.
- Facilitate probing conversations as participants share their thoughts about each main thing.
- Point out how mental "resketching" takes place as others respond to the sketches.



Further Exploration of the Main Thing



One Word Summary

adapted from <u>The Geranium on the Windowsill Just Died But Teacher You Went Right On</u> by Albert Cullum, Harlin Quist Books, © 1971



Making Connections

	"Text" to Self	
Connection:		
Related words:		
Connection:	"Text" to "Text"	
Related words:		
	<u>. </u>	
	"Text" to World	
Connection:		
Related words:		
	Possible Sentences	
·		
	Words for Word Wall	
		_
_		_

Notes for Presenters (pp. 13-14):

• Using the picture as a "text," engage participants in activities that focus on bringing language to life and building meaning.

17

• Keep asking how participants' responses are connected to and/or expand the main things about oral language development.



Exploration of Oral Language Development*

*The "text" for the activities on pages 15-16 was chosen to stimulate thinking. What "texts" would be appropriate for the students at grade level(s) you teach?

Whatever looks like a pigeon and acts like a pigeon usually makes a good pigeon pie.

(excerpt from Squids Will Be Squids by Jon Scieszka & Lane Smith)

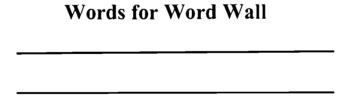
One Word Summary





Making Connections

	"Text" to Self	
Connection:		
Related words:		
	"Text" to "Text"	
Connection:		
Related words:		
	"Text" to World	
Connection:		
Related Words:		
Conce	pt of Definition Maps (see page 23)	



Notes for Presenters (pp. 15-16):

- Using the picture as a "text," engage participants in activities that focus on bringing language to life and building meaning.
- Keep asking how participants' responses are connected to and/or expand the main things about oral language development.



STRATEGIES AND ACTIVITIES FOR LANGUAGE DEVELOPMENT

WHAT DOES THE RESEARCH SAY?

. . . The most important activity for building the knowledge and skills eventually required for reading is that of reading aloud to children. . . . It [is] especially important to engage the child's active attention.

Adams, 1990

Children's books have 50% more rare words in them than does adult prime-time television and the conversations of college graduates.

Cunningham and Stanovich, 1993-94

The bulk of vocabulary growth during a child's lifetime occurs indirectly through language exposure rather than through direct teaching. The only opportunities to acquire new words occur when an individual is exposed to a word in written or oral language that is outside his current vocabulary.

Cunningham and Stanovich, 1998

Increasing the volume of student's reading is the single most important thing a teacher can do to promote large scale vocabulary growth.

Nagy, 1988

The goal for vocabulary development is to insure that students are able to apply their knowledge of words to appropriate situations and are able to increase and enrich their knowledge through independent encounters with words . . . [R]esearch . . . indicates that the best way to reach this goal is to help students add to their repertoires both specific words and skills that promote independent learning of words, and also to provide opportunities from which words can be learned.

Beck and McKeown, 1991

Implicit in school success is the teacher's own model of the language.

Thomas and Rinehart, 1990

While schools have the responsibility to accommodate the linguistic needs of students with limited proficiency in English, students' abilities and needs vary as do the capacities of different communities to support literacy development. If there are learning materials, instructional guides, and teachers who are proficient in the children's language, then language-minority children should be taught how to read in their native language while acquiring proficiency in spoken English and then subsequently taught to extend their skills to reading in English. If materials or teachers are not available or there are not enough children speaking a particular language to justify the development of a particular language program, then the priority should be to develop children's proficiency in English. Formal reading instruction should be preceded by educational opportunities for learning spoken English.

Adapted from Preventing Reading Difficulties in Young Children, 1998



READING ALOUD TO CHILDREN

Reading aloud to children helps them develop a love for good literature, motivation to pursue reading on their own, and familiarity with a variety of genre (Lipton & Hubble). Children's author, Bill Martin, Jr., expresses views on the importance of reading aloud in this way:

Now we have research that validates that when children are listening to the teacher read aloud, they're learning more about language and how it works than at any other time. They're learning more than when they're studying the rules of how to write and how to make language behave (46)."

REASONS TO READ ALOUD	HINTS FOR SUCCESS	
See, hear, and use new words.	Pick books that you really enjoy yourself.	
Enhance and enrich vocabulary.	Preview and practice before sharing with children.	
Develop a sense of sentence, rhythm, and	Make sure the children can see the text and any	
rhyme.	illustrations as you read.	
Model standard form of English.	Allow ample time, and adjust your pace as you read.	
Share a variety of writing styles.	Connect with the children frequently.	
Develop a sense of story and audience.	Read with expression, but in your own style.	
Stimulate writing.	If the book turns out to be a poor selection for the	
	group, feel free to abandon it.	
Develop a foundation for discussion.	Make the book available to the children for re-	
	reading independently.	
Read for a variety of reasons. (pleasure, knowledge, information, directions) EVERYDAY!!!		

INDEPENDENT READING PRACTICE

Adapted from: Fountas, I. and Pinnell, G.S.. (1996). *Guided Reading*, Heinemann.

Walls	Centers	
Name chart	Directions	
Nursery rhymes on large charts	Menus or recipes (restaurant or house center)	
Alphabet charts	Reference materials: encyclopedias, dictionaries, thesauruses	
Number charts	Information books	
Songs (e.g. "Happy Birthday to You")	Manuals	
Labels of lists	Reference charts, diagrams, maps	
Posters	Classroom Library	
Helpers' chart and other management charts with names	Big books	
Word wall	Baskets of books sorted by author, illustrator, theme, series or other genres	
Interactive writing; story retellings, story maps with labels, alternative texts	Books arranged by level	
Poster or poem charts	Browsing boxes	
Pocket charts	Class-published books	
	Paperbacks (novels)	

21



Criteria for Classroom Libraries Grades 2-3 Grade 2 Grade 3

Basic Library

at least 4 books per child	at least 4 books per child
quiet and well lighted	quiet and well lighted
seating or carpet	seating or carpet
area for at least 3 children	area for at least 3 children
G 11 G 1 T 11	4 11 . 1 1

Satisfactory Library – All the above plus:

more than 4 books per child	more than 4 books per child
area for at least 4 children	area for at least 4 children
partitioned from room	privacy with partitions
open-faced book presentation	some open-faced books
bulletin boards, displays, etc.	bulletin boards, displays, etc.

Excellent Library – All the above plus:

more than 8 books per child	more than 8 books per child
props for drama/rereading	books organized
name for area	name for area
area for at least 5 children	area for at least 5 children

FILL YOUR CLASSROOM WITH:

Traditional Literature	Poetry	
Folktales	Lyric Poetry	
Fables	Narrative Poetry	
Myths	Ballads	
Legends	Limericks	
Modern Fantasy	Concrete Poems	
Animal Fantasy	Haiku	
Quest Stories	Nonfiction	
Science Fiction	Biographies	
Picture Books	Informational Books	
Alphabet Books		
Wordless Books	Contemporary Realistic Fiction	
Easy to Read Books	Bibliotherapy	
Storybooks	Historical Fiction	

Encyclopedia, dictionary, thesaurus	Newspapers, magazines, maps, etc.
-------------------------------------	-----------------------------------

A SAMPLE OF CHILDREN'S BOOKS WRITTEN IN DIALECT:

Greenfield, E. (1978). Honey I Love: And other love poems. New York. Harper & Row.

Gibbons, Faye (1996). Mountain Wedding. William Morrow & Company. New York.

Ketteman, H. (1997). Bubba the Cowboy Prince: A Fractured Texas Tale. New York, Scholastic Press.

Laan, N. V. (1998). With a Whoop and a Holler. New York. Atheneum Books for Young Readers.

Lester, J. (1996). Sam and the Tigers. New York. Dial Books.

McKissack, P.C. (1986). Flossie & the Fox. New York. Dial Books.

Martin B. & Archambault J. (1986). Barn Dance. New York. Henry Holt and Company.

Martin B. & Archambault J. (1986). White Dynamite & Curly Kidd. New York. Holt, Rinehart & Winston.



HOW AND WHEN IS DIRECT VOCABULARY INSTRUCTION EFFECTIVE

- 1. Only a few words central to the context of the story or informational text are taught (Beck, Perfetti & McKeonwn, 1982; Wixson, 1986).
- 2. Words are taught **in meaningful contexts** that convey the particular meanings relevant to the text (Gipe, 1978/1979; Nagy & Herman, 1987).
- 3. The teaching of vocabulary is **integrated with** the activation and development of **prior knowledge** (Nagy & Herman, 1987).
- 4. Teachers teach words thoroughly by offering students **rich and varied information** about them (Beck, et.al., 1987, Nagy & Herman, 1987).
- 5. Students are exposed to a word many times (Nagy & Herman, 1987).
- 6. Students were **actively involved** in the process of learning the words (Beck, et. al., 1987; Nagy & Herman, 1987).
- 7. There is no one best **method** for vocabulary instruction (Beck & McKeown, 1991).
- 8. There is not a most effective **time** for teaching vocabulary. Instruction before reading, during reading, and after reading are appropriate based on the text to be read and the students involved (Beck, McKeown, 1991).



Activities for Language and Vocabulary Development

Many children love acting. With these activities they can have some fun and learn a few words at the same time.

1. In One Place—Make Your Body:

wiggle	collapse	expand	hang
wriggle	shake	contract	slouch
squirm	rock	curl	droop
stretch	sway	uncurl	sink
bend	bounce	rise	tumble
twist	bob	lurch	totter
turn	spin	lean	swing
flop	whirl	sag	

2. From Place to Place—Make Your Body:

creep	hop	meander	stalk
crawl	tramp	limp	race
roll	hustle	hobble	plod
walk	stride	stagger	amble
skip	prance	scramble	sprint
run	strut	march	slink
gallop	stroll	scurry	dodge
leap	saunter	trudge	

3. Make Your Legs and Feet:

kick	stamp	trample	mince
shuffle	tap	tip-toe	stumble
scuff	drag	slip	

4. Make Your Face:

smile	wink	yawn	wince
frown	gape	chew	grimace
sneer	scowl	stare	squint
pout	grin	glare	blink
leer	smile		

5. Make Your Hands:

open	grasp	snatch	pinch_
close	clap	pluck	poke
clench	scratch	beckon	point
grab	squeeze	pick	tap
stroke	wring	slap	clasp
poke	knead	pat	rub



24.

Additional Activities for Enhancing Language and Vocabulary Development

Brainstorming – Identify a key concept that represents a main topic to be studied. Students generate a list of words related to the concepts. All words, whether right or wrong, are recorded. During or after reading, the list may be modified. This can be a whole or small group, or an individual activity

Interactive Word Walls - A Word Wall is a classroom wall space devoted to commonly used words that students show an interest in reading and writing. To use word walls effectively:

- Begin with a blank wall, bulletin board, or space under a chalkboard.
- Divide the space into blocks for each letter of the alphabet, vowel sounds, or topics and subtopics for themes and units of study in the content areas.
- Make letters large enough and allow enough space between words so students can read the words from a distance.
- Select words that students frequently read or write.
- Encourage students to identify words they want on word walls as referents that will help them with independent reading and spelling. These may be high frequency, commonly misspelled words and words that can be used as patterns or keys for decoding many new words and syllables that students will encounter in reading and need for writing.
- Be selective and add words only if they represent a new pattern or category for reading and spelling. (If seed is on the wall, point out that students can use it as a key to help them with all ee words. It is not necessary to add meet, steer, and every other –ee word.)
- Refer to the word wall on a daily basis. Study the similarities and differences in words such as sounds, letters, and meanings with word building, sorting, and features analysis activities.
- Remove words the students can read and write to create room for other words.

Optional ideas:

- Use different colored paper for different kinds of words.
- Attach words with rolled masking tape so they can be manipulated easily.

Word Exploration – Word explorations use writing to promote learning. Students keep a learning log or journal where they record what they are learning. The teacher provides a concept or word, and the students write quickly and spontaneously (free write or quick write) everything they know about the word or concept. Students serve as the audience for their own writing; therefore, they need not be concerned about mechanics.

Possible Sentences – Students generate sentences to show and check what they know about words.

- Prepare a list of key terms for a text or refer to key terms supplied in textbook.
- Ask students to write a sentence in which two, three, or as many words as possible are used.
- Read to discover relationships between words and meanings in context.
- Revisit sentences. Discuss whether each sentence is possible. Revise if necessary.
- This strategy can be used as a pre-reading or post-reading vocabulary activity.



Word Sorts – The teacher identifies key words from a reading, and the students sort them into arrangements of two or more. This requires students to classify words based upon what they already know (prior knowledge). In order to group words into various categories, students must recognize meanings that are similar. Students literally sort out the technical terms that are written on cards or listed on an exercise sheet. The object of word sorting is to group words into different categories by looking for shared features among their meanings. This activity gives students the opportunity to teach and learn from each other while discussing and examining words together. Both open and closed word sorts can easily be adapted to any content area.

- Open Sort: Students are not aware of the category for sorting and, therefore, must find the relationships among the meanings of the words. This builds inductive reasoning.
- Closed Sort: Students are given the main categories into which the words are to be sorted. This process builds the ability to classify words.

Knowledge Rating – Students are given a list of words from a chapter or related to a specific topic and are asked to rate the words in three categories such as: "know it well," "heard of it," and "clueless." Students begin making connections with prior knowledge and the teacher learns about students' background related to the specific topic.

One-Word Summaries- Students must limit their response to a "text" (printed, pictured, on video, etc.) to a single word that captures the meaning for them. These words can then be used for possible sentences, concept of definition maps, word walls, and other activities that promote vocabulary development and language use.

Sketch-Resketch – Students draw or make a graphic representation that expresses the core meaning of a text and share their works. Students then re-sketch, mentally or on paper, different or additional meanings that result from sharing.

Semantic Map – Development of a semantic map or web can follow a brainstorming activity. Students distinguish relationships among words and cluster them into categories.

- Select a key concept, word, or a common Latin or Greek root that relates to the topic.
- Record related words or phrases.
- Graphically depict how the words or phrases are related to the key concept.

Concept Circles – This activity provides an opportunity to study words critically and relate words conceptually to one another. A concept circle may simply involve putting words or phrases in sections of a circle and directing students to describe or name the concept relationship that exists among the sections. A concept circle can also be constructed by leaving one or two sections blank. Students will fill in the word or two words that relate in some way to the terms of the other sections.

Concept of Definition Map— Use these maps to define and clarify meaning of unknown words. Procedure: Work out from the center of the diagram, poster board, or chart paper.

Write the concept being studied in the center of the map.

Ask – What is it? Then write the word that best answers this question.

(General class or category)

Ask – What are some examples? Give at least three. (Examples)

Ask – What is it like? (Properties)

Classification occurs in three ways. Students find:

1. The general class or category in which the concept belongs.



- 2. The attributes or properties that distinguish it from other members of the category.
- 3. Examples of the concept.

Graffiti Walls – A wall ultimately becomes a graphic organizer for a unit of study.

- Cover a large bulletin board or empty wall space with butcher paper.
- Write the topic in the center of the paper; students are invited to brainstorm and record words and phrases associated with the topic.
- As the unit progresses, the students continue to build the wall be adding new terms and concepts they have acquired.
- When the wall is sufficiently covered, the students critically examine it and attempt to categorize the words and phrases.

Word Analogies – Analogies allow students to identify relationships between words and ideas that have something in common.

l.	part to whole
	heel: shoe as kickstand:
2.	antonym
	always: never as many:
3.	synonym
	shriek: as cry: weep
4.	object and its use
	ruler: measuring as: cutting
5.	geography
	Harrisburg: Pennsylvania as Montgomery:
6.	cause – effect
	rain: wet as sun:
7.	person – situation
	Watergate: Nixon as oil crisis:
8.	measurement
	inches: ruler as hours:
9.	time
	24 hours: day as 365 days:
10.	classification
	pickup truck: as minivan: family

Vocabulary Self-Collection Strategy – Use passage context to find out what words students need to learn and to determine meanings appropriate for the context.

Procedures:

- 1. Read and discuss text assignment.
- 2. Divide class into teams of two to five students who will nominate a word that they would like to learn more about.
- 3. Present the word from each team to the entire class. A spokesperson for the team states the word and does the following.
 - Tell where the word is found in the printed material.
 - He/she then reads the passages and describes the context in which the word is used.
 - Team decides what the word means based upon how it is used and any other information that they can find from other sources.
 - Team tells why it is important to learn the word.
 - Students record all nominated words and their meanings in their vocabulary notebooks or learning logs.



Appendix



Prefixes

```
a, an [not, without] amoral (without a sense of moral responsibility), atheism, anemia, atypical, atom (not cutable),
   apathy (without feeling)
ab, abs. a [from, away] abnormal, avert (turn away)
acro [high] acropolis (high city), acrobat, acrogen (of the highest class), acronym, acrophobia (fear of height)
ad (ac, af, ag, al, an, ap, ar, as, at) [to, towards] admire (look at with wonder), attract, admit, advance, allege,
   announce, assert, aggressive, accept
ambi, amb [both, around] ambidextrous (skilled with both hands), ambiguous, amble
amphi [both] amphibious (living on both land and water), amphitheater
ana [on, up, backward] analysis (loosening up or taking apart for study), anatomy, anachronism
ante [before] antedate, anteroom, antebellum, antecedent
anti, ant [against] anticommunist, .antidote, anticlimax, antacid, antarctic
apo [from, off] apostasy (standing from. abandoning a professed belief), apology, apothecary, apostle
be [on, awav] bedeck, belabor, bequest, bestow, beloved
bene, bon [well] benefit, benefactor, benevolent, benediction. bonus, bona fide, bonanza
bi, bis, bin [both, double, twice] bicycle, biweekly, binoculars, bilateral, biscuit
by [side, close, near] bypass, bystander, by-product, bylaw, byline
cata [down, against] catalogue, catapult, catastrophe, cataclysm
circum, circ [around] circumference, circumnavigate, circumspect
co (con, col, cor, com) [together, with] compose, copilot, conspire, collect, concord
coni [dust] coniosis (disease which comes from inhaling dust)
contra, counter [against] controversy, contradict, counterpart
de [from, down] demote, depress, degrade, deject, deprive
di [two, twice] dilemma, diatom, dissect, diploma
dia [through, between] diameter, diagonal, diagram, diagnosis, dialogue
dis, dif [apart, away, reverse] dismiss, distort, distinguish, diffuse
dys [badly, ill] dyspepsia (digesting badly, indigestion) dystrophy
em, en [in, into] embrace, enslave
epi [upon] epidermis (upon the skin, outer layer of skin), epitaph, epithet, epigram, epitome
eu, ev [well] eulogize (speak well of, praise), eupepsia, euphony, eugenics
ex, e, ec, ef [out] expel (drive out), ex-mayor, exit, exorcism, eccentric (out of the center position), eject, emit
extra, extro [beyond, outside], extracurricular, extrovert, extraneous
for [away or off] forswear (to renounce an oath)
fore [before in time] foretell (to tell beforehand), forecast, foreshadow, foregone, forefather
hemi, demi, semi [half] hemisphere, hemicycle, semicircle, demitasse
homo [man] Homo sapiens, homicide, homunculus, hominid
hyper [over, above] hypercritical, hyperemia, hypersensitive, hypertensive, hyperactive
hypo [under] hypodermic, hypothesis, hypotension
idio [private, personal] idiom, idiosyncrasy, idiomatic
il (ir, in, im) [not] incorrect, illegal, immoral, irregular
in (il, im) [into] inject, inside, illuminate, impose, illustrate, implant, imprison
infra [beneath] infrared
inter [between] intercollegiate, interfere, intervene, interrupt (break between)
intra [within] intramural, intravenous (within the veins)
intro [into, inward] introduce, introvert (turn inward)
macro [large, excessive] macrodent (having large teeth), macrocosm
mal [badly, poor] maladjusted, malnutrition, malfunction, malady
meta [beyond, after, with] metabolism (thrown beyond, literally; hence, chemical and physical change), metaphor,
   metamorphosis, metaphysical
mis [incorrect, bad] misuse, misprint
miso [hating, wrong] misanthropist, misogamist, miser
mono [one] monoplane, monotone, monogamy, monochrome, monocle
multi [many] multiply, multiform, multilateral
neo [new] neopaganism, neoclassic, neologism, neophyte
non [not] nontaxable (not taxed), nontoxic, nonexistent, nonsense
```



```
ob (of, op, oc) [towards, against] obstruct, offend, oppose, occur
para [beside, almost] parasite (one who eats beside or at the table of another), paraphrase, parody, parachute,
   paramedic, parallel
penta [five] [entagon (figure or building having five angles or sides), Pentateuch, pentameter, pentathlon
per [throughout, completely] pervert (completely turn wrong, corrupt), perfect, perceive, permanent, persuade,
   pervade
peri [around] perimeter (measurement around an area), periphery, periscope, pericardium, period
poly [many] polygon (figure having many angles or sides), polygamy, polyglot, polychrome
post [after] postpone, postwar, postscript, postseason
pre [before] prewar, preview, precede, prevent, premonition
pro [forward, in favor of] project (throw forward), progress, pro-abortion, promote, prohibition
pseudo [false] pseudonym (false or assumed name), pseudo, pseudopodia
re [back, again] reclaim, revive, revoke, rejuvenate, retard, reject, return
retro [backwards] retrospective (looking backwards), retroactive, retrorocket, retrogression
se [aside] seduce (lead aside), secede, secrete, segregate
self [by oneself] self-determination, self-employed, self-service, selfish
sesqui [one and a half] sesquicentennial (one and one-half centuries)
sub [under] submerge (put under), submarine, subhuman, subject, substitute, subsoil, suburb
suf (sug, sup, sus) [from under] suffer, suggest, support, suspect, sufficient, suspend
super, supr, sur [above, over, more] supervise, superman, survivor, supreme, supernatural, superior
syn (sym, sys, syl) [with, together] sympathy, system, synthesis, symphony, syllable, synchronize (time together),
   synonym
trans, tra [across, beyond] transoceanic, transmit, traverse (lying across as a bridge over a stream), transfusion
tri [three] tricycle, triangle, tripod, tristate
ultra [beyond, exceedingly] ultramodern, ultraviolet, ultraconservative
un [not, release] unfair, unnatural, unbutton, unfasten
under [beneath] underground, underling
uni [one, below] unicycle, uniform, unify, universe, unique
vice [in place of] vice-president, vice-admiral, viceroy
```

Suffixes

```
able, ible [able, can do] capable, agreeable, edible, visible (can be seen)
ad.ade [result of action] monad (a unit, an individual), blockade (the result of a blocking action), lemonade
age [act of, state of, collection of] salvage (act of saving), storage, forage
al [relating to] sensual, gradual, manual, natural (relating to nature)
algia [pain] neuralgia (nerve pain)
an, ian [native of, relating to] Czechoslovakian (native of Czechoslovakia), African
ance, ancy [action, process, state] assistance, allowance, defiance, resistance
ant [performing, agent] assistant, servant, defiant
ar, er, or [one who, what which] doctor, baker, miller, teacher, racer, amplifier
ard, art [one who] drunkard, dullard, braggart
ary, ery, ory [relating to, quality, place where] dictionary, dietary, bravery, dormitory (a place where people sleep)
asis, esis, osis [action, process, condition] genesis, hypnosis, neurosis
ate [cause, make] enumerate, liquidate, segregate (causing a group to be set aside)
cian [having a certain skill or art] logician, musician, beautician, magician, physician
cide [kill] homicide, pesticide, genocide (killing a race of people)
cule, ling [very small duck] sapling
cy [action, function] hesitancy, prophecy, normalcy
dom [quality, realm, office] boredom, freedom, kingdom, stardom, wisdom (quality of being wise)
ee [one who receives the action] employee, devotee, nominee (one who is nominated), refugee, trustee
en [made of, make] silken, frozen, oaken, (made of oak), wooden, lighten
ence, ency [action, state of, quality] difference, conference, proficiency (quality of being proficient), urgency
er [see ar]
ery [see ary]
```



```
esce [to become] acquiesce (become restful, peaceful), coalesce
escent [in the process of] convalescent, obsolescent
ese [a native of, the language] Japanese, Vietnamese
esis [see asis]
esque [in the style of] burlesque, arabesque
ess [female] actress, goddess, lioness
et, ette [a small one, group] midget, octet, baronet, bassinet
fic [making, causing] scientific, specific
ful [full of] frightful, careful, helpful (full of help)
fy [make] fortify (make strong), simplify, terrify, amplify
hood [order, condition, quality] manhood, womanhood, brotherhood
ible [see able]
ic [nature of, like] acidic, metalic (of the nature of metal), heroic, poetic
ice [condition, state, quality] justice, malice
id, ide [a thing connected with or belonging to) fluid, fluoride
ile [relating to, suited for, capable of] domicile, agile, juvenile, senile (related to being old), missile
ine [nature of] feminine, masculine, genuine, medicine
ion, sion, tion [act of, state of, result of] action, injection, infection, suspension (state of suspending)
ish [origin, nature, resembling] foolish, Irish, clownish (resembling a clown)
ism [doctrine, system, manner, condition, characteristic] alcoholism, exorcism, heroism (characteristic of a hero),
   Communism, realism
ist [one who, that which] artist, dentist, violinist, racist
ite [nature of, quality of, mineral product] expedite, Israelite, graphite, sulfite, dynamite (quality of being powerful)
ity, ty [state of, quality] captivity, chastity, fraternity, clarity
ive [causing, making] assertive, abusive (causing abuse), affirmative, exhaustive
ize [make] emphasize, liberalize (make liberal), idolize, penalize, publicize
less [without] baseless, careless (without care), artless, fearless, helpless
ling [see cule]
ly [like, manner of] carelessly, fearlessly, hopelessly, shamelessly
ment [act of, state of, result] contentment, alignment, amendment (state of amending), achievement
mony [a resulting thing] patrimony, alimony, acrimony
ness [state of] carelessness, restlessness, lifelessness
oid [like, resembling] asteroid, spheroid, tabloid, anthropoid
ology [study, science, theory] biology, anthropology, geology, neurology
or [see ar]
ory [see ary]
osis [see asis]
ous [full of, having] gracious, nervous, vivacious (full of life), spacious
rhea [flowing, discharge] pyorrhea, diarrhea, gonorrhea (discharge from the reproductive organs)
ship [office, state, quality, skill, profession] friendship, authorship, scholarship, dictatorship
some [like, apt, tending to] lonesome, threesome, gruesome
tude [state of, condition of] gratitude, multitude (condition of being many), aptitude, solitude
ure [state of, act, process, rank] culture, literature, pressure, rupture (state of being broken)
ward [in the direction of] eastward, forward, backward
y [inclined to, tend to] cheery, crafty, faulty, dirty, itchy
```

Roots

acer, acid, acri [bitter, sour, sharp] acerbic (bitter, harsh), acerbate (embitter), acidity (sourness), acrid, acrimony acu [sharp] acute, acuity, acupuncture
ag, agi, ig, act [do, move, go] agent (doer), agenda (things to do), agile, navigate (move by sea), pedagogue (child-mover, teacher), ambiguous (going both ways, not clear), retroactive, agitate
ali, allo, alter [other] alias (a person's other name), alternative, alibi, alien (from another country), alter (change to another form), allotment, allocate
altus [high, deep] altimeter, exalt, altitude, alto
am, amor [love, liking] amiable, amorous, enamored
anim [mind, will] unanimous, animosity, equanimity, magnanimous, animal



anni, annu, enni [year] anniversary, annually (yearly), centenial (occurring once in 100 years), per annum, annuity anthrop [man] anthropoid (man-like, e.g., an ape), anthropology (study of mankind), misanthrope (hater of mankind), philanthropic (love of mankind)

antico [old] antique, antiquated, antiquity

arch [chief, first, rule] archangel (chief angel), architect (chief worker), archaic (first; very early), archives, monarchy (rule by one person), matriarchy (rule by the mother), patriarchy (rule by the father), archeology

aster, astr [star] aster (star flower), asterisk, asteroid, disaster (originally a bad happening from a contrary influence by a star), astrology (lit., star-speaking; pseudoscience of influence by stars and planets), astronomy (star law), astronaut (lit., star traveler; space traveler)

aud, aus [hear, listen] audible (can be heard), auditorium, audio, audition, audience, auditory, auscultate aug, auc [increase] augment, auction, augur

auto, aut [self] automobile (self-moving vehicle), autograph (self-writing; signature), automatic (self-acting), autonomy (lit., self-laws; self-government), autobiography (lit., self-life writing)

belli [war] rebellion, belligerent (warlike or hostile), bellicose

bibl [book] Bible, bibliography (writing, list of books), bibliomania (craze for books), bibliophile (book lover)

bio [life] biology (study of live things), amphibious, biography, biophysics, biopsy (cutting living tissue for examination), microbe (small, microscopic living thing), biogenesis

breve [short] breve, brevity, abbreviate, brief

bursa [purse, payment] reimburse, disbursements (money paid out)

cad, cas [to fall] cadaver, cadence, caducous (falling off), cascade

calor [heat] calorie (a unit of heat), calorify (to make hot), caloric, nonchalant

cande [shine] candor, candelabra, candid

cap, cip, cept [take] capable, capacity, capture, anticipate, participate, principal, accept, except, conception, deceptive, perception, conceive, receive, forceps

capit, capt [head] decapitate (to remove the head from), capital, captain, caption, recapitulate

carn [flesh] carnal, carnage, carnivorous (flesh eating), incarnate, reincarnation

caus, caut [burn, heat] cauterize, cauldron, caustic

cause, cuse, cus [cause, motive] because, excuse (to attempt to remove the blame or cause; exonerate), accusation
 ced, ceed, cede, cess [move, yield, go, surrender] cede (yield), antecedent (moving, occurring before), accede,
 concede, intercede, precede, recede, secede (move aside from), proceed (move forward), success

chrom [color] chrome (color purity), chromatic, chromosome (color body in genetics), Kodachrome, monochrome (one color), polychrome (many colored)

chron [time] chronological (in order of time), chronometer (time-measured), chronicle (record of events in time), synchronize (make time with, set time together), anachronism (lit., back in time; anything backwards in historical time)

cide [kill] suicide (self-killer or self-killing), homicide (man, human killer or killing), genocide (race killing), tyrannicide (tyrant killer or tyrant killing), pesticide (pest killer), germicide (germ killer), insecticide (insect killer)

cise [cut] decide (cut off uncertainty), precise (cut exactly right), concise, incision, scissors, criticize cit [to call, start] incite, citation, cite

civ [citizen] civic (relating to a citizen), civil, civilian, civvies (citizen clothing), civilization

clam, claim [cry out] exclamation, clamor, proclamation, reclamation, acclamation, declamation, claim

clemen [merciful] inclement (not merciful), clemency, clement

clud, clus, claus [shut] include (to take in), recluse (one who shuts himself away from others), claustrophobia (abnormal fear of being shut up, confined), conclude, include, preclude, seclude, close, closet

cognosc, **gnosi** [know] prognosis (forward knowing), diagnosis (thorough knowledge), recognize (to know again), incognito (not known), agnostic (not knowing about God)

cord, cor, card [heart] cordial (hearty, heartfelt), accord, concord, discord, record, courage, encourage (put heart into), discourage (take heart out of), core, coronary, cardiac

corp [body] corporation (a legal body), corpse, corps, corporal, corpulent

cosm [universe, world] cosmos (the universe), cosmic, cosmology, cosmopolitan (world citizen), cosmonaut, microcosm, macrocosm

crat [rule, strength] autocracy, democratic

crea [create] creature (anything created), recreation, creation, creator

cred [believe] creed (statement of beliefs), credo (a creed), credence (belief), credit (belief, trust), credulous (believing too readily, easily deceived)

32 . Appendix 5



cresc, cret, crease, cru [rise, grow] crescendo (growing in loudness or intensity), crescent (growing, like the moon in first quarter), acretion, concrete (grown together, solidified), increment (amount of growth), increase, decrease, accrue (to grow, as interest in money)

crit [separate, choose] critical, criterion (that which is used in choosing), diacritical, hypocrisy

cub, cumb [lie down, lean back] incubate (to hatch by keeping), encumber to place a burden upon), cumbersome, succumb, incumbent

cur, curs [run] current (running or flowing), concurrent, concur (run together, agree), curriculum (lit., a running, a course), cursory (done hastily, "on the run"), incur (run into), precursor (forerunner), recur, occur, courier cura [care] manicure (caring for the hands), curator, curative

cus, cuse (see cause)

cycl, cyclo [wheel, circular] Cyclops (a mythical giant with one eye in the middle of his forehead), cyclone (a wind blowing circularly: a tornado), unicycle, bicycle

deca [ten] decade, decalogue, decapod (ten feet), Decapolis, decathlon

dem [people] democracy (people-rule), demagogue (people-leader, one who stirs up people for selfish ends), demography (vital statistics of the people: deaths, births, etc.), epidemic (on or among the people; general), pandemonium

dent, don't [tooth] dental (relating to teeth), orthodontist (a dentist who practices orthodontia), denture, dentifrice derm [skin] hypodermic (under skin; injected under the skin), dermatology (skin study), epidermis (on skin; outer layer), taxidermy (arranging skin; mounting animals)

dic, dict [say, speak] dictation (how one speaks, what one says), dictionary, dictate, dictator, dictum (a saying), dictaphone, dictagraph, dictatorial, edict, predict, verdict, contradict, adjudicate (to speak the law, to judge), benediction

domin [master] dominate, dominion, domain, predominant, Anno Domini (in the year of our Lord, abbreviated A.D.) don [give] donate (make a gift), condone

dorm [sleep] dormant, dormitory

dox [opinion, praise] doxy (belief, creed, or ism), orthodox (having the correct, commonly accepted opinion), heterodox (differing opinion; contrary, self-contradictory), doxology (statement or song of praise), paradox drome [to run, step] syndrome (run together; symptoms) hippodrome (a place where horses run)

duc, duct [lead] duke (leader), induce (lead into, persuade), secure (lead aside), traduce (lead across in public disgrace, vilify), aquaduct (water leader, artificial channel), subdue, ductile (easily drawn out or hammered thin), viaduct, conduct, conduct, produce, reduce, educate

dura [hard, lasting] durable, duration, duramen, endurance

dynam [power] dynamo (power producer), dynamic, dynamite, hydro-dynamics (lit., water power), dyne (unit of power, force), dynamometer, dynasty (power, rule by successive members of a family)

end, endo [within] endoral (within the mouth), endocardial (within the heart), endoskeletal, endoplasm equi [equal] equinox, equilibrium

erg [work] energy, erg (unit of work), allergy, ergophobia (morbid fear of work), ergometer, ergograph

fac, fact, fic, fect [do, make] factory (the place where workmen are employed inmaking goods of various kinds), fact (a thing done, a deed), facsimile, facility, manufacture, faculty, amplification, affect

fall, fals [deceive] fallacious, falsify, fallacy

fer [bear, carry] ferry (carry by water), odoriferous (bearing an odor), coniferous (bearing cones, as a pine tree), pestiferous (bearing disease), fertile (bearing richly), defer, infer, refer, suffer (bear under, as under yoke), referee, referendum, circumference

fic, fect (see fac)

fid, fide, feder [faith, trust] fidelity, confident, confidente, infidelity, infidel, fiduciary (held in trust, confidential), perfidy (breaking faith), bona fide (in good faith), federal, confederacy, Fido

fila, fili [thread] filament (a threadlike conductor heated by electrical current), filiform (having the shape of a thread), filter, filet

fin [end, ended, finished] final, finite, infinite, finish, confine, fine, refine, define, finale

fix [fix] fix (a difficult position), transfix (to hold motionless), fixation (the state of being attached), fixture, affix, prefix, suffix

flex, flect [bend] flex (bend), reflex (bending back), flexible, flexor (muscle for bending), inflexibility, reflect, deflect, genuflect (bend the knee)

flu, fluc, fluv [flowing] influence (to flow in), fluctuate (to wave in an unsteady motion), fluviograph (instrument for measuring the flow of rivers), fluid, flue, flush, fluently, affluent

form [form, shape] form, uniform, conform, deform, reform, perform, formative, formation, formal, formula fort, forc [strong] fort, fortress (a strong point, fortified), fortify (make strong), forte (one's strong point), forte (strong, loud in music), fortitude (strength for endurance), force, effort, comfort, pianoforte, force (power)



Appendix

fract, frag [break] fracture (a break), infraction, fragile (easy to break), fraction (result of breaking a whole into equal parts), refract (to break or bend, as a light ray), refractive, fragment

fum [smoke] fume (smoke; odor), fumigate (destroy germs by smoking them out), perfume

gam [marriage] bigamy (two marriages), monogamy, polygamy (lit., many marriages), exogamy, endogamy, gamete, gambit

gastro [stomach] gastric, gastronomic, gastritis (inflammation of the stomach)

gen [birth, race, produce] genesis (birth, beginning), Genesis, genus, genetics (study of heredity), eugenics (lit., wellborn), genealogy (lineage by race, stock), generate, progeny (offspring), genitals (the reproductive organs), congenital (existing as such at birth), indigenous (born, growing or produced naturally in a region or country), genetic, hydrogen (lit., water-born element)

geo [earth] geometry (earth measurement), geography (lit., earth-writing), geocentric (earth centered), geology, geochemistry, geophysics

germ [vital part] germination (to grow), germ used (seed; living substance, as the germ of an idea), germane gest [carry, bear] congest (bear together, clog), suggestion (mental process by which one thought leads to another), congestive (causing congestion), gestation, suggestion, gesture

gloss, glot [tongue] polyglot (many tongues), epiglottis, glossary, glottic

glu, glo [lump, bond, glue] conglomerate (bond together), agglutinate (make to hold in a bond)

grad, gress [step, go] grade (step, degree), gradual (step by step), graduate (make all the steps, finish a course), graduated (in steps or degrees), aggressive (stepping toward, pushing), transgress (step across limits, break a law)

graph, gram [write, written] graph, graphic (written; vivid), autograph (self-writing, signature), photography (light-writing), graphite (carbon used for writing), phonograph (sound-writing), bibliography, monograph (writing on one subject), telegram (far writing)

grat [pleasing] congratulate (express pleasure over success), gratis (as a favor, free), gratuitous (gratis), gratuity (mark of favor, a tip), grateful, gracious, ingrate (not thankful; hence, unpleasant), ingratiate

grav [heavy, weighty] grave, gravity, aggravate, gravitate

greg [herd, group, crowd] gregarian (belonging to a herd), congregation (a group functioning together), segregative (tending to group aside or apart), aggregation

hab, habit [have, live] habitat (the place in which one lives), inhabit (to live in; to establish as residence), rehabilitate, habitual

helio [sun] heliograph (as instrument for using the sun's rays), heliotrope (a plant which turns to the sun)

hema, hemo [blood] hematid (red blood corpuscle), hemotoxic (causing blood poisoning), hemorrhage, hemoglobin, hemophilia, hematose

here, hes [stick] adhere, cohere, inherent

hetero [different] heterogeneous (different in birth; miscellaneous), heterodox, heterochromatic (of different colors), heteromorphic (of different forms), superheterodyne, heterosexual (with interest in opposite sex)

homo [same] homogeneous (of same birth or kind), homonym (word with same name or pronunciation as another), homosexual (with sex desire for those of the same sex), homologous (same-minded, agreeing), homogenize

hum, human [earth, ground, man] humility, (quality of lowliness), humane (marked by sympathy, compassion for other human beings and animals), humus, exhume, humanity

hydr, hydro, hydra [water] dehydrate (take water out of; dry), hydrant (water faucet), hydraulic (pertaining to water or to liquids), hydraulics, hydrogen, hydrophobia (fear of water), hydrodynamics, hydroelectric

hypn [sleep] hypnoidal (relating to hypnosis or sleep), hypnosis, Hypnos (god of sleep), hypnotherapy (treatment of disease by hypnosis)

ignis [fire] ignite, igneous, ignition

ject [throw] deject, inject, project (throw forward), eject, object, ejaculate

join, junct [join] junction (act of joining), enjoin (to lay an order upon; to command), juncture, conjunction, joint, adjoining, injunction

jud, judi, judic [judge, lawyer] judge (a public officer who has the authority to give a judgment), abjure (reject the case), judicial (relating to administration of justice), judicious, prejudice

jur, jus [law] justice (a just judgment; as justice must be served), conjure (to swear together; to imagine; to entreat; as, conjure the king to be merciful), juror, jurisdiction

juven [young] juvenile, juvenescent (becoming young), rejuvenate (to make young again)

later [side, broad] lateral, latitude

laut, lav, lot, lut [wash] lavish (flowing like water), dilute (to make a liquid thinner and weaker), ablution (a washing away), launder (to wash and iron clothes), lavatory, laundry, lotion, deluge



- leg [law] legal (lawful; according to law), legislate (to enact a law), legislature (a body of persons who can make laws), legitimize (make legal), legacy
- letter, lit, liter, litera [letters] litany (prayer consisting of invocations and responses), literary (concerned with books and writing), literature (the best works written during the century), literal, alliteration, obliterate levis [light] alleviate (lighten a load), levitate, levity
- lic, licit [permit] license (freedom to act), licit (permitted; lawful; conceded), illicit (not permitted), licentious (taking liberties; disregarding rules, especially in morals)
- lith [stone] monolith (one stone, a single mass), lithography (stone writing, printing from a flat stone or metal plate), neolithic (new stone, of the layer stone age), paleolithic (ancient stone)
- liver, liber [free] liberal (relating to liberty), delivery (freedom; liberation), liberalize (to make more free; as., to liberalize the mind from prejudice), deliverance
- loc, loco [place] locomotion (act of moving from place to place), locality (locale; neighborhood), allocate (to assign; to place; apportion), relocate (to put back into their homes)
- log, logo, ology [word, study, speech] Logo (the word, Jesus), logic (orig., speech; then reasoning), prologue, epilogue, dialogue, catalogue, logorrhea (a flux of words; excessively wordy), zoology (animal study), psychology (mind study), theology (god study)
- loqu, locut [talk, speak] eloquent (speaking out well and forcefully), loquacious (talkative), colloquial (talking together; conversational or informal), obloquy (a speaking against, a reproach), circumlocution (talking around a subject), soliloquy
- luc, lum, lus, lun [light] Luna (the moon goddess), lumen (a unit of light), luminary (a heavenly body; someone who shines in his profession), translucent (letting light come through), luster (sparkle; gloss; glaze), illuminate lude [play] ludicrous, prelude (before play), interlude
- magn [great] magnify (make great, enlarge), magnificent, magnanimous (great of mind or spirit), magnate, magnitude, magnum
- man [hand] manual, manage, manufacture, manacle, manicure, manifest, maneuver, emancipate
- mand [command] mandatory (commanded), remand (order back), writ of mandamus (written order from a court), countermand (order against, cancelling a previous order), mandate
- mania [madness] mania (insanity; craze; excessive craving), monomania (mania on one idea), kleptomania (thief mania; abnormal tendency to steal), pyromania (insane tendency to set fires), dipsomania (uncontrollable craving for alcoholic drink), manic, maniac
- mar, mari, mer [sea, pool] mermaid (fabled marine creature, half fish), marine (a sailor serving on shipboard), marsh (wetland, swamp), maritime
- matri, matro, matric [mother] matrimony (state of wedlock), maternal (relating to the mother), matris (mother goddess of the Hindu deities), matron
- medi [half, middle, between, halfway] mediate (come between, intervene), medieval (pertaining to the middle ages), mediterranean (lying between lands), medium (a person having the faculty to make contact with the supernatural), mediocre
- mega [great] megaphone (great sound), megacephalic (great-headed), megalith, megalopolis (great city; an extensive urban area including a number of cities), megacycle (a million cycles), megaton (force of a million tons of TNT), omega (great)
- mem [remember] memorandum (a note; a reminder), commemoration (the act of observing by a memorial or ceremony), memento, memoir, memo, memorable
- meter [measure] meter (a measure), gravimeter (instrument for measuring weight and density), voltameter (instrument to measure volts in an electric circuit), barometer, thermometer
- micro [small] microscope, microfilm, microcard, microwave, micrometer (device for measuring very small distance), micron (a millionth of a meter), microbe (small living thing), microorganism, omicron (small)
- migra [wander] migrate (to wander), emigrant (one who leaves a country), immigrate (to come into the land to settle), migrator (one who roves; a wanderer)
- mit, miss [send] emit (send out, give off), remit (send back, as money due), submit, admit, commit, permit, transmit (send across), omit, intermittent (sending between, at intervals), mission, missile
- mob, mot, mov [move] mobile (capable of moving), motionless (without motion), motor (that which imparts motion; source of mechanical power), emotional (moved strongly by feelings), motivate, promotion, demote mon [warn, remind] admonish (warn), admonition, monitor, premonition (forewarning), monument (a reminder or memorial of a person or event), reminisce



Appendix

- monstr, mist [show] demonstrate (to display; show) muster (to gather together; collect; put on display) demonstration, monstrosity
- mori, mort, mors [mortal, death] mortal (causing death or destined for death), immortal (not subject to death), mortality (rate of death), immortality, mortician (one who buries the dead), mortification
- morph [form] amorphous (with no form, shapeless), anthropomorphic (man form), Morpheus (the shaper, god of dreams), morphine (drug making sleep and dreams), metamorphosis (a change of form, as a caterpillar into a butterfly), morphidite
- multi, multus [many, much] multifold (folded many times), multilinguist (one who speaks many languages), multipled (an organism with many feet), multiply (to increase a number quickly by multiplication)
- nasc, nat [to be born, to spring forth] nature (the essence of a person or a thing), innate (inborn, inherent in), international (between or among nations), renascence (a rebirth; a revival), natal, native, nativity
- neur [nerve] neuritis (inflammation of a nerve), neuropathic (having a nerve disease), neurologist (one who practices neurology), neural, neurosis, neurotic
- nom [law, order] autonomy (self-law, self-government), astronomy, Deuteronomy (lit., second law, as given by Moses), gastronomy (lit., stomach law; art of good eating), agronomy (lit., field law; crop production), economy (household law, management)
- nomen, nomin [name] nomenclature, nominate, nominal
- nounce, nunci [warm, declare] announcer (one who makes announcements publicly), enunciate (to pronounce carefully), pronounce (declare; articulate), renounce (retract; revoke), denounce
- nov [new] novel (new; strange; not formerly known), renovate (to make like new again), novice, nova, innovate nox, noc [night] nocturnal, equinox (equal nights), noctiluca (something which shines by night)
- null [none] null, nullification, nullify, nullifidian (one who has no faith), nulliparous
- number, numer [number] numeral (a figure expressing a number), numeration (act of counting), numberable (can be numbered), enumerate (count out, one by one), innumerable
- omni [all, every] omnipotent (all powerful), omniscient (all knowing), omnipresent (present everywhere), omnivorous (all eating), omnibus (covering all things)
- onus [burden] onerous (burdensome), onus, exonerate (to take out or take away a burden)
- onym [name] anonymous (without a name), pseudonym (false name), antonym (against name; word of opposite meaning), synonym
- oper [work] opera (a work which has been set to music and is sung instead of spoken), operate (to labor; function), opus (a musical composition or work), cooperate (work together)
- ortho [straight, correct] orthodox (of the correct or accepted opinion), orthodontist (tooth straightener), orthopedic (originally pertaining to straightening a child), orthography (correct writing, spelling), unorthodox
- oss, osteo [bone] ossicle (a small bone), ossification (the process of making into bone), osteopath (one who practices osteopathy), osteoporosis (a condition in old age when bones become porous and fragile)
- pac [peace] pacifist (one for peace only; opposed to war), pacify (make peace, quiet), Pacific Ocean (peaceful ocean)
- pan [all] Pan American, panacea (cure-all), pandemonium (place of all the demons; wild disorder), pandemic, panchromatic (sensitive to all colors), pantheism (all-god belief; belief that God is all and all is God)
- pater, patr [father] patriarch (the head of the tribe, family), patron (a wealthy person who supports as would a father), paternity (fatherhood; responsibility, etc.), patriot
- path, pathy [feeling, suffering] pathos (feeling of pity, sorrow), pathetic, sympathy, antipathy (against feeling), apathy (without feeling), empathy (feeling or identifying with another), telepathy (far feeling; through transference), pathogenic (disease being born; causing suffering or disease)
- ped, pod [foot] pedal (lever for a foot), impede (get the feet in a trap, hinder), impediment, pedestal (foot or base of a statue), pedestrian (foot traveler), centipede, tripod (three-footed support), podiatry (care of the feet), antipodes (opposite feet; parts of the earth diametrically opposed)
- pedo [child] orthopedic, pedagogue (child leader, teacher), pedant (narrow-minded teacher), pediatrics (medical care of children)
- pel, puls [drive, urge] compel, dispel, expel, repel, impel, propel, pulse, impulse, pulsate, compulsory, expulsion, repulsive
- pend, pens, pond [hang, weigh] pendant (a hanging object), appendix, pendulum, depend, impend, suspend, perpendicular, pending, dispense, pensive (weighing thought), appendage, ponderous (weighty)
- phan, phen [show, appear] phantom, phenomental, fantasy
- phemi [speak] euphemism (speak well of), prophet
- phil [love] philosophy (love of wisdom), philanthropy, philharmonic, bibliophile, Philip, Philadelphia (city of brotherly love)



Appendix

- **phobia** [fear] phobia (abnormal fear), claustrophobia (fear of closed places), acrophobia (fear of high places), photophobia (fear of light), aquaphobia (fear of water), pyrophobia (fear of fire)
- **phon** [sound] phonograph, phonetic (pertaining to sound), phonology, symphony (sounds with or together), polyphonic (having many sounds or tunes), dictaphone, euphony (pleasing sound)
- photo [light] photograph (light-writing), photoelectric, photoflash, photogenic (artistically suitable for being photographed), photometer (light meter), photon (a quantum of light energy), photosynthesis (action of light on chlorophyll to make carbohydrates)
- pict [paint] pictograph (writing with pictures or symbols), picture (make a mental image), depiction (the act of depicting or representing), picturesque, pictorial
- plac, plais [please] placid (calm, unruffled), placatory (appeasing, soothing), placebo, placate, complacent (self-satisfied)
- plenus [full] plenary, replenish, plentiful, plenteous
- plic, pli, ply [fold] inexplicable, pliable, implicate
- plu, plur, plus [more] plus (indicating that something is to be added), plural (more than one), pluralist (one who holds two or more jobs), plurisyllabic (having more than one syllable)
- **pneuma, pneumon** [breath] pneumatic (pertaining to air, wind or other gases), pneumonia (disease of the lungs), pneumatogram (tracing of respiratory movements)
- pod (see ped)
- poli [city] metropolis (mother city; main city), police, politics, Indianapolis, megalopolis, Acropolis (high city, fortified upper part of Athens), cosmopolite (world citizen)
- **pon, pos, pound** [place, put] postpone (put afterward), component, opponent (one put against), proponent, depose, expose, impose, purpose, deposit, deposition, expound, compound, posture (how one places himself), position, post
- pop [people] population (the number of people in an area), Populist (a member of the Populist party), populous (fil of inhabitants), popular
- port [carry] porter (one who carries), portable, transport (carry across), report, export, import, support, comport, deportment (how one carries himself, behaves), portage, transportation, port, disport
- portion [part, share] portion (a part; a share, as a portion of pie), proportion (the relation of one share to others), portionless (without portionl without dowry)
- posse, potent [power] posse (an armed band; a force with legal authority), possible, potent, potentate, omnipotent, impotent
- prehend [seize] apprehend (seize a criminal, seize an ideal), comprehend (seize with the mind), comprehensible, comprehensive (seizing much, extensive), reprehensible (needing to be seized back, rebuked)
- **prim, prime** [first] primacy (state of being first in rank), prima donna (the first lady of opera), primitive (from the earliest or first time), primary, primal
- proto [first] prototype, protocol, protagonist, protozoan
- psych [mind, soul] psyche (soul, mind), psychic (sensitive to forces beyond the physical), psychiatry (healing of the mind), psychology, psychopath (mind feeling; one with mental disease), psychosis (serious mental disorder), psychotherapy (mind treatment), psychogenic (of psychic birth, origin)
- punct [point, dot] punctual (being exactly on time), punctum (a dotl a point), compunction (remorse; points of guilt), punctuation, puncture, acupuncture
- **put** [think] computer (a computing or thinking machine), deputy, reputable (honorable; estimable; a thinker), dispute, repute
- quies [be at rest] acquiesce, quiescent, quiet
- reg, recti [straighten] regular, rectify (make straight), regiment, rectangle, correct, direct, erect, incorrigible
- ri, ridi, risi [laughter] ridicule (laughter at the expense of another; mockery), deride (make mock of; jeer at), risible (likely to laugh), ridiculous
- rog, roga [ask] prerogative (privilege; asking before), interrogation (questioning; the act of questioning), surrogate, derogatory
- rupt [break] rupture (break), interrupt (break into), abrupt (broken off), disrupt (break apart), erupt (break out), incorruptible (unable to be broken down)
- salv, salu [safe, healthy] salvation (act of being saved), salvage (that which is saved after appearing to be lost), salvable, salubrious (healthy), salutary (promoting health), salute (wish health to)
- sat, satis [enough] sate (to satisfy, sate with food), satisfy (to give pleasure to; to give as much as is needed), satient (giving pleasure, satisfying), satiate, saturate



- sci [know] science (knowledge), conscious (knowing, aware), omniscient (knowing everything), prescient (knowing beforehand)
- **scope** [see, watch] scope (extent one can see), telescope, microscope, kaleidoscope (instrument for seeing beautiful forms), periscope, horoscope (hour watcher), episcopal (overseeing; pertaining to a bishop), stethoscope
- scrib, script [write] scribe (a writer), scribble, inscribe, describe, subscribe, prescribe, ascribe, scrivener, manuscript (written by hand), scripture (the Bible)
- sed, sess, sid [sit] sedentary (characterized by sitting), sedate (sitting, settled, dignified), preside (sit before), president, reside, subside, sediment (that which sits or settles out of a liquid), session (a sitting), obsession (an idea that sits stubbornly in the mind), possess
- sen [old] senior, senator, senescent (growing old), senile (old; showing the weakness of old age)
- sent, sens [feel] sentiment (feeling), presentiment (feeling beforehand), assent, consent, resent, dissent, sentimental (having strong feeling or emotion), sense, sensation, sensitive, sensory, dissension
- sequ, secu, sue [follow] sequence (following of one thing after another), sequel, consequence, subsequent, obsequious (blindly following), prosecute, execute, consecutive (following in order), ensue, pursue, second (following first)
- serv [save, serve] servant, service, subservient, servitude, servile, reservation, preserve, conserve, deserve, observe, conservation
- sign, signi [sign, mark, seal] signal (a gesture or sign to call attention), signature (the mark of a person written in his own handwriting), design, insignia (distinguishing marks), signify
- silic [flint] silicon (a nonmetallic element found in the earth's crust), silicosis (a disease prevalent among miners and stone cutters who breathe much dust)
- simil, simul [like, resembling] similar (resembling in many respects), simulate (pretend; put on an act to make a certain impression), simulation (pretense; counterfeit display), assimilate (to make similar to), simile
- sist, sta, stit, stet [stand] assist (to stand by with help), circumstance, stamina (power to withstand, to endure), persist (stand firmly; unyielding; continue), stanchion (a standing brace or support), substitute (to stand in for another), status (standing), state, static, stable, stationary
- solus [alone] solo, soliloquy, solitaire, solitude
- solv, solu [loosen] solvent (a loosener, a dissolver), solve, solvency, insolvency, absolve (loosen from, free from), resolve, soluble, solution, resolute, dissolute (loosen morally)
- somnus [sleep] somnific, insomnia (not being able to sleep), somnambulant (a sleepwalker)
- **soph** [wise] sophomore (wise fool), philosophy (love of wisdom), sophisticated (worldly wise), sophistry, sophist, theosophy (wise about God)
- spect, spect, spic [look] specimen (an example to look at, study), specific, spectator (one who looks), spectacle, speculate, aspect, expect, inspect, respect, prospect, retrospective (looking backwards), suspect (look under), perspective, circumspect, introspective, conspicuous, despicable
- sphere [ball, sphere] sphere (a plant a ball), stratosphere (the upper portion of the atmosphere), hemisphere (half of the earth), biosphere, spheroid
- spir [breathe] spirit (lit., breath), conspire (breathe together; plot), inspire (breathe into), aspire (breathe toward), expire (breathe out, die), spirant, perspire, respiration
- **spond, spons** [pledge, answer) sponsor (one who pledges responsibility to a project), correspond (to communicate by letter; sending and receiving answers), irresponsible, respond
- stereo [solid] stereotype (to fix in lasting form), stereome (strengthening tissue in plants), stereograph
- string, strict [draw, tight] stringent (draw tight, rigid), astringent (drawing tightly, as skin tissue), strict, restrict, constrict (draw tightly together), boa constrictor (snake that constricts its prey)
- stru, struct [build] structure, construct, instruct, obstruct, construct (build in the mind, interpret), destroy, destruction, instrument (originally, a tool for building)
- sume, sump [take, use, waste] assume (to take; to use), consume (to use up), presume (to take upon oneself before knowing for sure), presumption, sump pump (a pump that takes up water)
- tact, tang, tag, tig, ting [touch] contagious (transmission of disease by touching), contact (touch)m tact (sense of touch for the appropriate), intact (untouched, uninjured), intangible (not able to be touched), tangible, contingent (touching together, depending on something), tactile
- techni [skill, art] technician (one who is skilled in the mechanical arts), pyrotechnics (display of fireworks), technique, technology
- tele [far] telephone (far sound), telegraph (far writing), telegram, telescope (far look), television (far seeing), telephoto (far photograph), telecast, telepathy (far feeling), teletype, teleprompter
- tempo [time] tempo (rate of speed), pro tem (for the time being), extemporaneously, contemporary (those who live at the same time), temporary, temporal



- ten, tin, tain [hold] tenacious (holding fast), tenant, tenure, untenable, detention, retentive, content, pertinent, continent, obstinent, abstain, contain, pertain, detain, obtain, maintain
- tend, tent, tens [stretch, strain] tendency (a stretching; leaning), extend, intend, contend, pretend, superintend, tender, tent, tension (a stretching, strain), tense, tensile, attention

terra [earth] territory, terrestrial, terrain, terrarium

- test [to bear witness] testament (a will; bearing witness to someone's wishes), detest, attest (certify; affirm; bear witness to), testimony, contest, intestate
- the, theo [God, a god] monotheism (belief in one god), polytheism (belief in many gods), atheism (belief there is no god), pantheism (belief that God is all things), theogony (birth, origin of the gods), theology
- therm [heat] therm (heat unit), thermic, thermal, thermometer, thermos bottle, thermostat (heat plus stationary; a device for keeping heat constant), hypothermia (subnormal body temperature), thermonuclear
- thesis, thet [place, put] antithesis (place against), hypothesis (place under), synthesis (put together), epithet tom [cut] atom (not cutable; smallest particle of matter), appendectomy (cutting out an appendix), tonsillectomy, epitome (cut on; a summary), dichotomy (cutting in two; a division), anatomy (cutting, dissecting to study
- tort, tors [twist] torsion (act of twisting, as a torsion bar), torture (twisting to inflict pain), retort (twist back, reply sharply), extort (twist out), distort (twist out of shape), contort, tortuous (full of twists, as a mountain road) tox [poison] toxic, intoxicate, antitoxin
- tract, tra [draw, pull] tractable (can be handled), abstract (to draw away), tractor, attract, subtract, subtract, subtract (the number to be drawn away from another)
- trib [pay, bestow] tribute (a fine paid to be conquering power), distribute (to divide among many), redistribute, contribute (to give money to a cause), attribute, retribution, tributary

trophy [nourishment, development] dystrophy (badly nourished), atrophy

tui, tuit, tut [guard, teach] tutor (one who teaches a pupil), tuition (payment for instruction or teaching fees), intuent (knowing by intuition)

turbo [disturb] turbulent, turmoil, disturb, turbid

- typ [print] type, prototype (first print, model), typical, typography, typewriter, typology (study of types, symbols) typify
- ultima [last] ultima (last; final; most remote), ultimate (man's last destiny), ultimatum (the final or last offer that can be made)

unda [wave, flow] abundant, inundate, undulation, redundant

- uni [one] unicorn (a legendary creature with one horn), uniface (a design that appears only on one side), unify (make into one), university, unanimous, universal
- vac [empty] vacate (to make empty), vacuum (a space entirely devoid of matter), evacuate (to remove troops or people), vacation, evacuee, vacant
- vale, vali, valu [strength, worth, valor] valor (value; worth), validity (truth; legal strength), equivalent (of equal worth), evaluate (find out the value; appraise actual worth), valedictorian, valiant, value
- ven, vent [come] convene (come together, assemble), intervene (come between), circumvent (come around), adventure, invent, subvention, venturesome, convent, inventory, venture, venue, event, eventually, souvenir, contravene (come against), avenue, advent, convenient, prevent
- ver, veri [true] verity (truth), very, verify (show to be true), verisimilitude, aver (say to be true, affirm), verdict vert, vers [turn] avert (turn away), divert (turn aside, amuse), invert (turn over), introvert (turn inward, one interested in his own reactions), extrovert (turn outward, one interested in what is happening outside himself), controversy (a turning against; a dispute), reverse, versatile (turning easily from one skill to another), convertible, adversary, adverse
- vest [clothe, to dress] vest (an article of clothing; vestment), investor (one who has laid out money for profit), travesty, vestry, vestment

vic, vicis [change, substitute] vicarious, vicar, vicissitude

- vict, vinc [conquer] victor (conqueror, winner), evict (conquer out, expel), convict (prove guilty), convince (conquer mentally, persuade), invincible (not able to be conquered), evince, eviction
- vid, vis [see] video (television), vision, evident, provide, providence, visible, revise, supervise (oversee), vista, visit, visage
- viv, vita, vivi [alive, life] revive (make live again), survive (live beyond, outlive), vivid (full of life), vivify (enliven), convivial (fond of "living it up" with friends), vivisection (surgery on a living animal), vitality, vivacious (full of life)



voc [call] vocation (a calling), avocation (occupation not one's calling), convocation (a calling together), invocation (calling in), evoke, provoke, revoke, advocate, provocative, vocal, vocation, vocabulary

vol [will] malevolent, benevolent (one of good will), volunteer, volition

vola [to fly] volatile (able to fly off or vaporize), volley, volery, volitant

volcan, vulcan [fire] Vulcan (Roman god of fire), volcano (a mountain erupting fiery lava), volcanize (to undergo volcanic heat), vulcanist

volvo [turn about, roll] voluble (easily turned about or around), voluminous, volution, revolt

vor [eat greedily] voracious, carnivorous (flesh-eating), herbivorous (plant-eating), omnivorous (eating everything), devour (eat greedily)

zo [animal] zoo (short for zoological garden), zoology (study of animal life), zoomorphism (attributing animal form to God), zodiac (circle of animal constellations), protozoa (first animals; one-celled animals)

Numerical Prefixes Prefix Symbol Multiples and Equivalent Prefix Symbol Multiples and Equivalent **Submultiples Submultiples** 10^{12} 10^2 T hundredth part trillionfold centi c tera 10⁹ 10^3 thousandth part G billionfold milli giga m 10^6 10^6 millionth part M millionfold micro u mega 10⁹ 10^3 billionth part k thousandfold nano kilo n 10^{12} 10^2 trillionth part hundredfold hecto h pico p 10^{15} quadrillionth part 10 tenfold femto f deka da 10¹⁸ 10¹ quintillionth part d tenth part atto deci a



HINTS, HELPERS AND EXPECTATIONS

For Students with Limited English Proficiency (LEP) and Students Learning English as a Second Language (ESL)

- 1. Rely on yourself and your abilities; your common sense, love for children and open minded attitudes; your knowledge of child development and language acquisition; your good teaching practices.
- 2. Learning begins where the student is. You will get positive results if you expect positive results. Lack of the English language is not an intellectual deficiency.
- 3. Communicate in any way possible. (#31 addresses the need for a communication notebook). Body language is important. Speak slowly and distinctly, in a normal tone. Gradually make your language more complex.
- 4. Make no assumptions that LEP students understand. Have them demonstrate their understanding whenever possible.
- 5. Accept any verbal response in a positive manner. Use correction sparingly. Do not correct the students' grammar until they are comfortable with English usage. (Perhaps repeat the sentence correctly, but do not draw attention to their error directly.)
- 6. Learn all you can about the students' country and culture (don't go overboard and overwhelm the students... Asian students tend to be shy about drawing attention to themselves). Expect cultural differences and try to understand and respect them.
- 7. Encourage students to speak their native language with friends or family members at school. (The psychological effects can be negative.)
- 8. Daily instructional objectives should be specific and limited in content.
- 9. Build schema (background information) for the student whenever possible.
- 10. Show empathy for the student, not sympathy.
- 11. Appreciate and capitalize on what the LEP student brings into your classroom: fluency and literacy in a language, conceptual development, a high motivation to learn English, and a rich cultural heritage.
- 12. Using common sense and empathy as our guide, help the student learn acceptable behavior. Discipline appropriately, when necessary.
- 13. Be positive, patient, reinforcing, and at ease. SMILE and keep the stress level as low as possible for the student and for yourself.
- 14. Use many VISUAL aids and clues to help the student understand.



- 15. Learn to pronounce the student's name. Do not try to Americanize it unless the student initiates the change.
- 16. A silent period is normal for an LEP student. Generally it takes several weeks or months for the student to adjust to a new language environment and gain suffic9ient input for spontaneous speech production to begin.
- 17. Developmental stages of language learning are predictable. Nouns and verbs are learned first; pronouns and adjectives come later. Once the student learns to use nouns and verbs, simple sentences can be made.
- 18. Be sure the student understands standard classroom procedures.
- 19. Try to get a parent volunteer to work with the student on a regular basis.
- 20. Provide many opportunities for interaction among students.
- 21. Have an English-speaking student read simple texts aloud to the LEP student. Encourage the LEP student to follow along and repeat.
- 22. Involve the student in as much as possible, as soon as possible.
- 23. Encourage LEP students to work together and assist one another. Do not allow them to become too dependent on each other or exclusive of other members of the class.
- 24. Allow LEP students to participate in more than one reading group if possible. They may need to hear the lesson twice.
- 25. Each day give the LEP student some meaningful assignment in which they can be successful. Handwriting or math calculations are often good for this.
- 26. Provide the student with as many listening opportunities as possible.
- 27. Help the English-speaking students understand and respect these newcomers and their situations by studying the LEP student's country and compare it to the culture in the United States.
- 28. In elementary school, especially, many teachers prepare a special folder or box for each LEP student that includes picture cards, word cards, penmanship sheets, simple readers, flash cards or other age-appropriate materials. LEP student should ALWAYS have work to do when unable to participate in the regular class work. THE STUDENT SHOULD NOT JUST SIT!



ADDITIONAL ACTIVITIES TO DEVELOP ORAL LANGUAGE

- 1. Story Wheel:
 - 1.1. Assign each group a children's picture book.
 - 1.2. Have students read the book.
 - 1.3. Divide the book into events. Around 8 events make a challenging but not too hard story-wheel activity.
 - 1.4. Have students draw a large circle on butcher paper. Use of a string and chalk may help with precision. Divide the circle into wedges (like pieces of a pie) corresponding to the number of events identified for the particular story. Cut the wedges.
 - 1.5. Color each of the scenes on a wedge of the circle.
 - 1.6. Paste parts of the circle in chronological order, in an exploded circle on another sheet of paper. This can be the "visual aid" to a book talk about the book.
- 2. Read, reread, and enjoy books familiar to children. Write your own version to a familiar story.
- Cinderella stories
- The Gingerbread Man and The Stinky Cheese Man
- Little Red Riding Hood and Lo Po Po
- Legends
- Tall tales
- 3. Read and enjoy literature with rich vocabulary (homonyms, idioms, cliches); then create your own response.
- Amelia Bedelia A Cache of Jewels
 The King Who Reigned Kites Sail High
- Anamalia Many Lucious Lollipops
- Ouick as a Cricket
- 4. Read and write stories and poems containing literary techniques such as figurative language, alliteration, similes, personification, analogies.
- 5. Read and discuss content texts, relating to prior knowledge and experiences; then create response projects using new words and the language of the unit. Expand language usage in content texts by searching for synonyms, antonyms, homonyms, and multiple meanings.
- 6. Choral reading
- Poems for Two Voices
- Chants and Rap
- 7. Reader's Theater and other related drama
- Commercially prepared
- Create your own scripts
- 8. Storytelling by teachers and students(with props such as puppets)
- The oral tradition

Fables

- Folk tales Legends
- 9. Character Interviews (literary or historical)
- InQuest
- Levels of Questioning
- 10. Character Role Plays
- Descriptive language
- Character journals
- Circle Stories



- If You Give a Mouse a Cookie
- Create your own circle stories (demands active listening and critical thinking skills, as well as knowledge of story structure)
- 11. Discussion (teacher-led, student-led)
- Content unit response
- Character education
- Current events
- Narrative and informational texts
- 12. Grand Conversations (Marilyn Eeds)
- Instructional Conversations
- 13. Word for the Day/Thought for the Day

ABOVE ALL: READ ALOUD DAILY!!!



LITERATURE CIRCLES

Adapted from: Harvey Daniels. (1994). Literature circles: Voices and choice in the student-centered classroom. York, ME: Stenhouse.

"Literature circles are small, temporary discussion groups who have chosen to read the same story, poem, article, or book. While reading each group-determined portion of the text (either in or outside of class), each member prepares to take specific responsibilities in the upcoming discussion, and everyone comes to the group with the notes needed to help perform that job. The circles have regular meetings, with discussion roles rotating each session. When they finish a book, the circle members plan a way to share highlights of their reading with the wider community; then they trade members with other finishing groups, select more reading, and move into a new cycle. Once readers can successfully conduct their own wide-ranging, self-sustaining discussions, formal discussion roles may be dropped."

Literature Circles build metacognitive capacity in children, particularly in understanding narrative text and images. They:

- promote a love for literature and positive attitudes toward reading
- reflect a constructivist, child-centered model of literacy
- encourage extensive and intensive reading
- encourage talk about language, word choice, and sentence structures
- invite natural discussions that lead to student inquiry and critical thinking
- support diverse response to texts
- foster interaction and collaboration
- provide choice and encourage responsibility
- expose children to literature from multiple perspectives
- nurture reflection and self-evaluation

Quick training procedure (A more in-depth description can be found in Daniels, 1994.)

- 1. Provide a wide choice of good books, and invite everyone to "choose themselves" into a group of four people who want to read the same book.
- 2. Hand out sets of role sheets and let people in each group divide themselves up however they want. The roles that are *required* are:



- a. **Discussion director:** Has the official responsibility to think up some good discussion questions, convene the meeting and solicit contributions from other group members.
- b. Literary luminary/passage master: Takes readers back to memorable, important sections of the text and reads them aloud.
- c. Connector: Takes everyone from the text world out into the real world where experiences in their own life, happenings at school or in the community, or other people and problems they are reminded of are connected with the literature.
- d. **Illustrator**: Adds a graphic, nonlinguistic response to the text a sketch, cartoon, diagram, flowchart, or stick-figure scene.

Optional roles include:

- a. **Summarizer:** Prepares a brief summary of that day's reading, a quick one-or two-minute statement that conveys the key points and main highlights.
- b. Vocabulary enricher/word wizard: Is on the lookout for a few especially important words in the day's reading, words that may be puzzling or unfamiliar; marks them down when reading, looks them up in the dictionary, and records definition, marks words that are repeated a lot as keys to meaning of the text.
- c. **Travel tracer:** Keeps track of when the setting changes, where the action takes place in the day's reading. Describes each setting in detail, either with words or with an action map or a diagram that can be shown to the group.
- d. Investigator/researcher: Digs up background information on any topic related to the book. Might include information about the author, time period portrayed in the book, geography, weather, culture, or history of the book's setting—not a formal research report.
- 3. Have someone serving in each role read aloud its description for the whole class, so that everyone hears what other roles will be part of the group. Clarify nature of the roles and answer questions.
- 4. Give a set amount of time for reading and role-sheet preparation (20-30 minutes is plenty).

 Tell the groups to assign themselves a section of the book that everyone feels can comfortably be finished in five minutes less than the allotted time. The remaining five minutes will be used to prepare the role sheet.
- 5. When everyone has done the reading and prepared the role sheets, invite groups to get together for 15-20 minutes. Clearly explain that the main goal is to have a natural conversation about the book. Role sheets will serve as a starting point for the discussion.



On-Lion" for Kids



100

PICTURE BOOKS EVERYONE SHOULD KNOW

Peggy Rathmann

http://www.nypl.org/branc/kids/gloria.html

reproduced by permission of G. P. Putnam's Sons

ABUELA by Arthur Dorros. Illustrated by Elisa Kleven. Dutton.

ALEXANDER AND THE TERRIBLE, HORRIBLE, NO GOOD, VERY BAD DAY by Judith Viorst. Illustrated by Ray Cruz. Atheneum.

ANIMALS SHOULD DEFINITELY NOT WEAR CLOTHING by Judi Barrett. Illustrated by Ron Barrett. Atheneum.

ANANSI AND THE MOSS-COVERED ROCK by Eric A. Kimmel. Illustrated by Janet Stevens. Holiday House.

ANDY AND THE LION by James Daugherty. Viking.

BEN'S TRUMPET by Rachel Isadora. Greenwillow.

BLUEBERRIES FOR SAL by Robert McCloskey. Viking.

THE BOSSY GALLITO: A TRADITIONAL CUBAN FOLK TALE retold by Lucia M. Gonzalez. Illustrated by Lulu Delacre. Scholastic.

BREAD AND JAM FOR FRANCES by Russell Hoban. Illustrated by Lillian Hoban. HarperCollins.

BROWN BEAR, BROWN BEAR, WHAT DO YOU SEE? by Bill Martin Jr. Illustrated by Eric Carle. Holt.

CAPS FOR SALE; A TALE OF A PEDDLER, SOME MONKEYS AND THEIR MONKEY BUSINESS

by Esphyr Slobodkina. HarperCollins.

THE CARROT SEED by Ruth Krauss. Illustrated by Crockett Johnson. HarperCollins.

A CHAIR FOR MY MOTHER by Vera B. Williams. Greenwillow.

CHICKA CHICKA BOOM BOOM by Bill Martin, Jr. and John Archambault. Illustrated by Lois Ehlert. Simon & Schuster.

CORDUROY by Don Freeman. Viking.

CURIOUS GEORGE by H. A. Rey. Houghton.

THE DAY JIMMY'S BOA ATE THE WASH by Trinka H. Noble. Illustrated by Steven Kellogg. Dial.

DEAR ZOO by Rod Campbell. Simon & Schuster.

DOCTOR DE SOTO by William Steig. Farrar.

FARMER DUCK by Martin Waddell. Illustrated by Helen Oxenbery. Candlewick Press.

THE FORTUNE-TELLERS by Lloyd Alexander. Illustrated by Trina Schart Hyman. Dutton.

FREIGHT TRAIN by Donald Crews. Greenwillow.

GEORGE AND MARTHA by James Marshall. Houghton.

GO AWAY, BIG GREEN MONSTER! by Ed Emberley. Little, Brown.

GOOD NIGHT, GORILLA by Peggy Rathmann. Putnam.

GOODNIGHT MOON by Margaret W. Brown. Illustrated by Clement Hurd. HarperCollins.

GRANDFATHER'S JOURNEY by Allen Say. Houghton.



HAPPY BIRTHDAY, MOON by Frank Asch. Simon & Schuster.

HAROLD AND THE PURPLE CRAYON by Crockett Johnson. HarperCollins.

HARRY THE DIRTY DOG by Gene Zion. Illustrated by Margaret Graham. HarperCollins.

HENNY PENNY illustrated by Paul Galdone. Clarion.

HORTON HATCHES THE EGG by Dr. Seuss. Random House.

I KNOW AN OLD LADY WHO SWALLOWED A FLY illustrated by Glen Rounds. Holiday House.

IF YOU GIVE A MOUSE A COOKIE by Laura J. Numeroff. Illustrated by Felicia Bond. HarperCollins.

IS IT RED? IS IT YELLOW? IS IT BLUE? AN ADVENTURE IN COLOR by Tana Hoban. Greenwillow.

IT COULD ALWAYS BE WORSE: A YIDDISH FOLKTALE retold and illustrated by Margot Zemach. Farrar.

JOHN HENRY by Julius Lester. Illustrated by Jerry Pinkney. Dial.

THE JUDGE: AN UNTRUE TALE by Harve Zemach. Illustrated by Margot Zemach. Viking.

JULIUS by Angela Johnson. Illustrated by Dav Pilkey. Orchard.

KOMODO! by Peter Sis. Greenwillow.

LEO THE LATE BLOOMER by Robert Kraus. Illustrated by Jose Aruego. HarperCollins.

LITTLE BLUE AND LITTLE YELLOW by Leo Lionni. Astor-Honor.

THE LITTLE DOG LAUGHED AND OTHER NURSERY RHYMES by Lucy Cousins. Dutton.

THE LITTLE OLD LADY WHO WAS NOT AFRAID OF ANYTHING by Linda Williams. Illustrated by Megan Lloyd. HarperCollins.

LITTLE RED RIDING HOOD retold and illustrated by Paul Galdone. McGraw-Hill.

LYLE, LYLE, CROCODILE by Bernard Waber. Houghton.

LUNCH. By Denise Fleming. Holt.

MADELINE by Ludwig Bemelmans. Viking.

MAISIE GOES SWIMMING by Lucy Cousins. Little, Brown.

MAKE WAY FOR DUCKLINGS by Robert McCloskey. Viking.

MARTHA CALLING by Susan Meddaugh. Houghton.

MIKE MULLIGAN AND HIS STEAM SHOVEL by Virginia L. Burton. Houghton.

MILLIONS OF CATS by Wanda Gág. Putnam.

MISS NELSON IS MISSING by Harry Allard and James Marshall. Illustrated by James Marshall. Houghton.

MR. GUMPY'S OUTING by John Burningham. Holt.

THE MONKEY AND THE CROCODILE retold and illustrated by Paul Galdone. Clarion.

MORRIS' DISAPPEARING BAG by Rosemary Wells. Dial.

MOUSE PAINT by Ellen S. Walsh. Harcourt.

MUFARO'S BEAUTIFUL DAUGHTERS: AN AFRICAN TALE retold and illustrated by John Steptoe. Lothrop.

MUSHROOM IN THE RAIN adapted from the Russian of V. Suteyev by Mirra Ginsburg. Illustrated by Jose Aruego and Ariane Dewey. Simon & Schuster.

THE NAPPING HOUSE by Audrey Wood. Illustrated by Don Wood. Harcourt.

OFFICER BUCKLE AND GLORIA by Peggy Rathmann. Putnam.

OLD BLACK FLY by Jim Aylesworth. Illustrated by Stephen Gammell. Holt.

OVER IN THE MEADOW by John Langstaff. Illustrated by Feodor Rojankovsky. Harcourt.



OWEN by Kevin Henkes. Greenwillow.

PAPA, PLEASE GET THE MOON FOR ME by Eric Carle. Simon & Schuster.

PEREZ AND MARTINA by Pura Belpré. Illustrated by Carlos Sanchez. Viking.

PIERRE: A CAUTIONARY TALE by Maurice Sendak. HarperCollins.

THE POLAR EXPRESS by Chris Van Allsburg. Houghton.

THE RANDOM HOUSE BOOK OF MOTHER GOOSE: A TREASURY OF 386 TIMELESS NURSERY RHYMES selected and illustrated by Arnold Lobel. Random House.

ROSIE'S WALK by Pat Hutchins. Simon & Schuster.

ROUND TRIP by Ann Jonas. Greenwillow.

RUMPELSTILTSKIN retold and illustrated by Paul O. Zelinsky. Dutton.

SEVEN BLIND MICE by Ed Young. Putnam.

THE SNOWY DAY by Ezra Jack Keats. Viking.

STONE SOUP retold and illustrated by Marcia Brown. Simon & Schuster.

THE STORY OF BABAR, THE LITTLE ELEPHANT by Jean de Brunhoff. Random.

THE STORY OF FERDINAND by Munro Leaf. Illustrated by Robert Lawson. Viking.

STREGA NONA by Tomie De Paola. Simon & Schuster.

SWAMP ANGEL by Anne Isaacs. Ilustrated by Paul O. Zelinsky. Dutton.

SWIMMY by Leo Lionni. Knopf.

SYLVESTER AND THE MAGIC PEBBLE by William Steig. Simon & Schuster.

THE TALE OF PETER RABBIT by Beatrix Potter. Warne.

TEN, NINE, EIGHT by Molly Bang. Greenwillow.

THERE'S A NIGHTMARE IN MY CLOSET by Mercer Mayer. Dial.

THE THREE BILLY GOATS GRUFF by P.C. Asbjfrnsen and J.E. Moe. Illustrated by Marcia Brown. Harcourt.

THE THREE ROBBERS by Tomi Ungerer. Atheneum.

TIKKI TIKKI TEMBO retold by Arlene Mosel. Illustrated by Blair Lent. Holt.

THE TRUE STORY OF THE THREE LITTLE PIGS BY A. WOLF as told to John Scieszka. Illustrated by Lane Smith. Viking.

TUESDAY by David Wiesner. Houghton.

TWO OF EVERYTHING: A CHINESE FOLKTALE retold and illustrated by Lily Toy Hong. Whitman.

THE VERY HUNGRY CATERPILLAR by Eric Carle. Philomel.

WE'RE GOING ON A BEAR HUNT retold by Michael Rosen. Illustrated by Helen Oxenbury. McElderry.

THE WHEELS ON THE BUS adapted and illustrated by Paul O. Zelinsky. Dutton.

WHEN I WAS YOUNG IN THE MOUNTAINS by Cynthia Rylant. Illustrated by Diane Goode. Dutton.

WHERE THE WILD THINGS ARE by Maurice Sendak. HarperCollins.

WHERE'S SPOT? by Eric Hill. Putnam.

WHISTLE FOR WILLIE by Ezra Jack Keats. Viking.

WHY MOSQUITOES BUZZ IN PEOPLE'S EARS: A WEST AFRICAN TALE retold by Verna Aardema. Dial.

ZOMO THE RABBIT: A TRICKSTER TALE FROM WEST AFRICA retold/illustrated by G. McDermott. Harcourt



ORAL LANGUAGE AND VOCABULARY DEVELOPMENT MODULE RELATED RESEARCH

Language Development:

Berko Gleason, J., Ed. (1997) The Development of Language. (Fourth Edition) Boston: Allyn & Bacon.

Literacy Framework:

- Cambourne, B. (1995). Toward an educationally relevant theory of literacy learning: Twenty years of inquiry. *The Reading Teacher*, 49, 182-190.
- Chall, J.S. (1996). Stages of reading development (2nd ed.). Fort Worth, TX: Harcourt Brace.
- Evans, J. (1994). Overview of oral language development continuum. Education Department of Western Australia. Portsmouth NJ: Heinemann.
- Halliday, M. (1995). Learning how to mean. In J.W. Stewig and M. Jett-Simpson (Eds.), Language arts in the early childhood classroom. Detroit: Wadsworth.

Classroom Environments:

- Adams, M. (1990). Beginning to read: Thinking and learning about print. Cambridge, MA: MIT Press.
- Anderson, Hiebert, Scott, & Wilkinson. (1985). Becoming a nation of readers: The report of the commission on reading. Washington, D.C.: The National Institute of Education.
- Clay, M. (1991). Becoming literate: The construction of inner control. Portsmouth NJ: Heinemann.
- Galda, L., and Cullinan, B.E. (1994). Literature for literacy: What research says about the benefits of using tradebooks in the classroom. In D.F. Lancy (Ed.), *Children's emergent literacy: From research to practice*. Westport, CT: Praeger.
- Galda, L., Cullinan, B.E., and Strickland, D.S. (1993). *Language, literacy and the child.* Fort Worth, TX: Harcourt Brace Jovanovich College Publishers.
- Gambrell, Linda. (1996). Creating classroom cultures that foster reading motivation. The Reading Teacher, 50, 1,14-25
- Gambrell, L. & Almasi, J.F. (Eds). (1996). Lively discussions: Fostering engaged reading. Newark, DE: International Reading Association.
- Hill, B.C., Johnson, J.J., Schlick-Noe, K.L. (`1995). *Literature Circles and Response*. Norwood MA: Christopher Gordon.
- Hiebert, E.H. (1996). Creating and sustaining a love of literature. . . And the ability to read it. In M.F. Graves, P. van den Broed, & B.M. Taylor (Eds.), *The first R: Every child's right to read*. New York: Teachers College, Columbia University.
- International Reading Association and the National Council for Teachers of English. (1996). Standards for the English language arts. Newark, DE: International Reading Association/Urbana, IL: National Council for Teachers of English.



- Morrow, L.M. (1989). Designing the classroom to promote literacy development. In D. S. Strickland and L. M. Morrow (Ed.), *Emerging literacy: Young children learn to read and write* (pp. 1-15). Newark, DE: International Reading Association.
- Peterson, R. & Eeds, M. (1990). Grand conversations: Literature groups in action. New York: Scholastic.
- Snow, C.E., Burns, M.S. and Griffin, P. (1998). Preventing reading difficulties in young children. Washington, DC: National Academy Press.
- Tomlinson, C. M. and Lynch-Brown, C. (1996). Essentials of children's literature. Boston, MA: Allyn and Bacon.
- Vandermay, R. (1990). Improving reading. Burlington, WI: WriteSource Publishers.

Teaching Other Language Students:

- Koskinen, P. S., et. al. (1999). Shared reading, books, and audio tapes: Supporting diverse students in school and at home. *The Reading Teacher*. 52, 430-444.
- Hadaway, N. L. and Munday, J. (1999). Children's informational picture books visit a secondary ESL classroom. *Journal of Adolescent and Adult Literacy*, 42, 464-475.
- Hints, helpers and expectations: Students with limited English proficiency. Warren County ESOL and Bilingual Program.

Vocabulary Instruction:

- Bear, D.R., Invernizzi, M., Templeton, S., & Johnston, F. (1996). Words their way: Word study for phonics, vocabulary and spelling instruction. Upper Saddle River, NJ: Prentice Hall.
- Beck, I.L. and McKeown, M.G. (1991) Conditions of vocabulary development. In R. Barr, M. Kamil, P. Mosenthal, & P.D. Pearson (Eds.), *Handbook of Reading Research*, 2, White Plains, N.Y: Longman.
- California Department of Education. (1996). Teaching reading: A balanced, comprehensive approach to teaching reading in pre-kindergarten through grade three. Sacramento, CA: California Department of Education.
- Cunningham, P.M. (1991). Phonics they use. New York: Harper-Collins.
- Cunningham, A.E. and Stanovich, K. E. (1998). What reading does for the mind. *American Educator*, 22, 1&2, 8-15.
- Daniels, H.. (1994). Literature circles: Voice an choice in the student-centered classroom. York, ME: Stenhouse.
- Graves, M.R., and Slater, W. (1996). Vocabualry instruction in content areas. In D. Lapp, J. Flood, & N. Fernan (Eds.), Content area reading and learning: Instructional strategies. Needham Heights, MA: Allyn and Bacon.
- Johnson, A. P. and Rasmussen, J. B. (1998). Classifying and super word web: Two strategies to improve productive vocabulary. *Journal of Adolescent and Adult Literacy*, 42, 204-207.
- Marzano, R., & Marzano, J. (1988). A cluster approach to elementary vocabulary instruction. Newark, DE: International Reading Association.



- McKeown, M., Beck, I., Omanson, R., & Pople, M. (1985). Some effects of the nature and frequency of vocabulary instruction on the knowledge and use of words. *Reading Research Quarterly*, 20, 222-235.
- Nagy, W.E. (1988). *Teaching vocabulary to improve reading comprehension*. Newark, DE: International Reading association.
- Pinnell, G.S. & Fountas, I.C. (1998) Word Matters: Teaching phonics and spelling in the reading/writing classroom. Portsmouth, NH: Heinemann.
- Rupley, W. H., Logan, J. W., and Nichols, W. D. (1999). Vocabulary instruction in a balanced reading program. *The Reading Teacher*, 52, 336-346.
- Soderman, A.K., Gregory, K.M., O'Neill, L.T., Scaffolding emerging literacy: A child-centered approach for preschool through grade 5. (1999). Boston, MA: Allyn and Bacon.
- Stanovich, K.E. (1993-1994). Romance and reality. The Reading Teacher, 47, 4.
- Tompkins, G.E. (1997). Literacy for the 21st century: A balanced approach. Upper Saddle River, NJ: Merrill.
- Vandermay, R. (1990). Improving Reading. Burlington, WI: Write Source.

Technology and Language Development

- Lapp, D., Flood, J., and Fisher, D. (1999). Intermediality: How the use of multiple media enhances learning. *The Reading Teacher*, 52, 776-780.
- Leu, D. J., Karchmer, R. A., and Leu, D. D. (1999). The Miss Rumphius effect: Envisionments for literacy and learning that transform the internet. *The Reading Teacher*, 52, 636-642,
- Rekrut, M. D. Using the internet in classroom instruction: A primer for teachers. Journal of Adolescent and Adult Literacy, 42, 546-557.
- Educational Leadership. Themed Issue. Integrating technology into the classroom. Vol. 56, No. 5, February 1999





U.S. Department of Education Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



NOTICE

REPRODUCTION BASIS

