

English-Language Arts Framework
and
Computer Software

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Language arts includes four elements: reading, writing, listening, and speaking. An effective language arts program integrates these elements so students are not practicing skills in isolation, but are working on skills in a meaningful context. Teachers, administrators, and parents model good language arts with an emphasis on communication and understanding meaning. Teachers provide students with opportunities to learn to communicate their ideas effectively and to work in cooperative groups.

Reading Activities

The goals of reading instruction are for students to get meaning from the printed text, become fluent in language, apply what they have learned to their lives, and read for their enjoyment. Effective teachers provide students with a variety of literature from several cultures and genres. Teachers allow students many opportunities to share and ask questions about what they have read.

Prior to reading, teachers should provide students with activities which provide background knowledge and relate the reading selection to their lives. Building vocabulary is essential prior to reading. Teachers can also read part or all of the reading selection or provide audio-visual materials that relate to the reading.

When reading through the selection themselves, students can read with a partner or have an expert reader, a good student reader, read to a small group of students while they follow along. Students can also read in small reciprocal teaching groups where they predict what will happen, read the selection together, develop thinking questions that require more than a yes or no answer, clarify unfamiliar words or ideas, and summarize the selection in one or two sentences.

Writing Activities

The goals of writing instruction are for students to use strategies to communicate effectively to an audience with a purpose and to recognize when their writing is unclear and revise. Teachers should provide students opportunities to reflect on their reading and write about it. Teachers should model and teach students the steps of writing: prewriting, drafting, responding, editing, revising, and publishing.

Teachers should provide a variety of writing activities for their students. Daily journal writing encourages students to write fluently and reflect on what they have read. Other writing activities can include creating books to read and share, writing a script for a TV show, rewriting a reading selection in a different genre, from a different point of view, or for a different audience, using computer programs, such as HyperStudio or word processors, to create book reports or original stories, and writing a new ending or creating a sequel for a story.

Teachers can monitor students' recreational reading using reading logs, student-teacher conferences, and book reports. Students keep a record of selections they have read daily. After students finish a book, they schedule conferences with their teacher to discuss their reading or they can write a book report. Literature Lab (Dandy Lion, 1991) and Responding to Literature (Creative Teaching Press, 1993) offer several alternatives to the traditional book report that students enjoy. Some ideas are to create a diorama or map of the setting of the story, construct a timeline of the major events of the story, rewrite the book for a younger audience, write a telegram describing the book in twenty words, make a book jacket that includes information on the author on the inside flaps, create a magazine advertisement promoting the book, write a newspaper article about an event in the story, and create a travel brochure for the setting of the story.

Speaking and Listening Activities

The goals of speaking and listening instruction are for students to describe their encounters with their reading and writing and to communicate their understandings and insights. Teachers need to model good listening and speaking techniques, including how to listen attentively, how to rephrase or ask for clarification, and how to disagree tactfully during a discussion. Teachers also need to create a positive classroom environment in which students feel comfortable expressing themselves without the fear of rejection or ridicule.

Students should have many opportunities to discuss their readings and speak in front of others. Show and tell in early grades encourages students to share their lives with others. Drama and role playing encourages students to express themselves and helps them to explore the thoughts, feelings, and motivations of another person. In choral reading and Reader's Theater, students can write their own scripts and share their reading. Conducting interviews, writing commercials, and making speeches in the upper grades not only provide students opportunities to speak, but also to use higher level thinking and reasoning skills.

Language Arts Computer Software

The majority of the educational computer software focuses on the reading and writing aspects of language, though most of them incorporate listening or speaking as part of their programs through reading text aloud to students or allowing students to record their own voices. Students can use general software, such as word processors or outliners, to create scripts or speeches they present to their audiences.

The following selection of computer software (the majority being multi-platform CD-ROMs) are programs which support the English-Language Arts Framework with the exception of some of the software focusing on Language Mechanics. Much of the Language Mechanics software are drills that practice an isolated skill. However, these are provided since they present the material in motivating ways.

Many electronic storybooks, including Pecos Bill (Phillips), Sitting on the Farm (Sanctuary Woods), and Fisher Price's "Read and Play" do not take advantage of the computer's capabilities. The ones included on the following list offer more than simply reading the book or giving children hot spots, the places children can click on to make cute things happen but do not help students understand the text or check for understanding. However, these storybooks can still be used effectively in the classroom. For example: In a unit on tall tales, students can view Pecos Bill and compare it to another version of the same tale in a writing assignment.

The following list does not include reference books such as electronic encyclopedias or atlases. Although these programs are very useful when students are writing research projects, these programs were out of the scope of this paper. Also, this list does not include IBM software, except when the program is both IBM and Macintosh.

Software Focusing on Language Mechanics

Title: Grammar Games (CD-ROM)
Publisher: Davidson
Platform: Macintosh/IBM
Approximate Price: \$30
Hard Disk Space: no installation required (on Macintosh)
Grade Level: upper elementary
Summary: This program includes drills for identifying sentences and fragments, end punctuation, spellings of plural nouns, and proofreading. This program does not require higher level thinking skills and does not go beyond very elementary grammar. Students are rewarded for correct answers with a variety of games. This program is appropriate for the student who needs more practice with simple grammar rules.

Title: Grammar Rock (CD-ROM)
Publisher: Creative Wonders
Platform: Macintosh/IBM
Approximate Price: \$35
Hard Disk Space: no installation required (on Macintosh)
Grade Level: elementary
Summary: This program includes drills for identifying parts of speech. It also includes the original School House Rock videos. This program does not go beyond identifying parts of speech; however, the School House Rock videos are instructional and the tunes catch the interest of students and can help students remember the different parts of speech. This program is appropriate for the student who needs more practice with identifying parts of speech.

Title: Interactive Reading Journey (CD-ROM)
Publisher: The Learning Company
Platform: Macintosh/IBM
Approximate Price: \$70
Hard Disk Space: no installation required (on Macintosh)
Grade Level: primary
Summary: There are two volumes in this series to date. The programs focus on phonics, reading comprehension, and vocabulary. Students participate in a variety of activities and read several short stories. A weakness is the phonics portion of the program is taught in isolation.

Title: Kid's Encyclopedia (CD-ROM)
Publisher: Random House
Platform: Macintosh/IBM
Approximate Price: \$25
Hard Disk Space: 5 MB (on Macintosh)
Grade Level: elementary
Summary: This program's main strength is links to other selections in the encyclopedia. Realistic illustrations and photographs aid in defining words and concepts. A weakness in this program is that the computer will not read a text selection to a student.

Title: Me and My World: Multimedia Picture Dictionary (CD-ROM)
Publisher: Soft Key
Platform: Macintosh/IBM
Approximate Price: \$10
Hard Disk Space: no installation required (on Macintosh)
Grade Level: primary
Summary: This program's main strength is its text-sound-picture connection to teach vocabulary. However, the pictures are small and simplistic drawings. Many of the words are not illustrated.

Title: Reader Rabbit (CD-ROM)
Publisher: The Learning Company
Platform: Macintosh/IBM
Approximate Price: \$35
Hard Disk Space: no installation required (on Macintosh)
Grade Level: primary
Summary: There are three volumes in this series to date. The programs focus on phonics in isolation. These programs drill students on beginning and ending sounds, rhyming words, and compound words. These programs are good for the student who needs more practice in phonics.

Title: Word City (CD-ROM)
Publisher: Sanctuary Woods
Platform: Macintosh/IBM
Approximate Price: \$20 (bundled with five other programs)
Hard Disk Space: 10 MB (on Macintosh)
Grade Level: upper elementary
Summary: This program drills students on vocabulary, spelling, using context, and listening in isolation. Students need good reading skills before using this program. This program does not take advantage of the speech abilities of the computer. This program is ideal for the students who enjoy some competition.

Software Focusing on Reading

Title: Discus books (CD-ROM)

Publisher: Discus

Platform: Macintosh/IBM

Approximate Price: \$20

Hard Disk Space: no installation required (on Macintosh)

Grade Level: elementary

Summary: Discus has several series. All of them allow students to have words defined in English and Spanish. However, the program is simply an electronic storybook with background music. There are no comprehension activities.

Silly CDs: My Silly CD of ABC's, My Silly CD of Colors, My Silly CD of Counting, My Silly CD of Opposites

Journeys (collections of short stories): Emergent Level 1, Emergent Level 2

Kids Can Read!: Aesop's Fables, Cinderella, Heather Hits Her First Home Run, A Long Hard Day on the Ranch, Moving Gives Me a Stomach Ache, Mud Puddle, The Night Before Christmas, The Paper Bag Princess, Scary Poems For Rotten Kids, The Tale of Benjamin Bunny, The Tale of Peter Rabbit, The Tell-Tale Heart, Thomas' Snow Suit.

National Geographic: Birds and How They Grow, Butterflies, Dinosaurs, Farm Animals, Spiders, A Tree Through the Seasons, Whales, What Air Can Do

Title: I Can Read (CD-ROM)
Publisher: Media Vision
Platform: Macintosh/IBM
Approximate Price: \$30
Hard Disk Space: 0.5 MB (on Macintosh)
Grade Level: elementary
Summary: There are three stories in this series. Each story includes comprehension questions. The strength of these programs is the different reading activities from listening to a story without the text, reading the text with the computer, and reading the text alone.
Always Arthur
Buster's First Thunderstorm
Who Wants Arthur?

Title: Living Books (CD-ROM)
Publisher: Broderbund
Platform: Macintosh/IBM
Approximate Price: \$30
Hard Disk Space: no installation required (on Macintosh)
Grade Level: elementary
Summary: This series is always growing. Most storybooks offers speech and text in at least one other language, Spanish (Just Grandma and Me is also in Japanese). Although the graphics are more involved and appealing to young readers, the programs are merely electronic books with background music. There are no comprehension activities with the stories.
Arthur's Birthday, Arthur's Reading Race, Arthur's Teacher Troubles, The Berenstain Bears Get in a Fight, The Berenstain Bears in the Dark, Dr. Seuss's ABC, Green Eggs and Ham, Harry and the Haunted House, Just Grandma and Me, Little Monster at School, The New Kid on the Block, Ruff's Bone, Sheila Rae, the Brave, Stellanuna, The Tortoise and the Hare

Title: Magic Tales (CD-ROM)
Publisher: Davidson
Platform: Macintosh/IBM
Approximate Price: \$30
Hard Disk Space: no installation required (on Macintosh)
Grade Level: elementary
Summary: There are six folk tales in this series to date. Each storybook includes beautiful graphics and music. Each storybook begins with background knowledge of the tale being presented. However, like many electronic story books, the program does not include any comprehension activities.
Baba Yaga and the Magic Geese (Russia)
Imo and the King (Africa), Liam Finds a Story (Ireland)
The Little Samurai (Japan)
The Princess and the Crab (Italy)
Sleeping Cub's Test of Courage (Native American)

Title: Reader Rabbit's Reading Development Library (CD-ROM)
Publisher: The Learning Company
Platform: Macintosh/IBM
Approximate Price: \$30
Hard Disk Space: no installation required (on Macintosh)
Grade Level: primary
Summary: There are four volumes (two stories on each volume) in this series to date. A strength of these programs is that each story is told from three points of view. Students can also write simple letters to characters in the story and get replies back. Comprehension activities are very limited.
Goldilocks and the Three Bears/The Three Little Pigs
Jack and the Beanstalk/City Mouse, Country Mouse
The Goose That Laid the Golden Egg/Princess and the Pea
King Midas/The Ugly Duckling

Title: Reading Galaxy (CD-ROM)
Publisher: Broderbund
Platform: Macintosh/IBM
Approximate Price: \$30
Hard Disk Space: 10 MB (on Macintosh)
Grade Level: upper elementary
Summary: This game show-like program focuses on reading comprehension. The computer will read story selections and questions to students. This program encourages high level thinking and reasoning in a game-like atmosphere. This program is appropriate for all upper grade students, regardless of reading level.

Title: Wiggle Works (CD-ROM)
Publisher: Apple Home Learning
Platform: Macintosh
Approximate Price: \$40
Hard Disk Space: 10 MB
Grade Level: primary
Summary: There are two volumes (three stories on each volume) in this series to date. Students can record their own reading of the stories. They can also print out coloring book pages of the books. This program is appropriate for all primary grade students.
Frog's Lunch/Birds on Stage/Peanut Butter Rhino
The Animal Picnic/Mousetrap/Rabbit's Party

Software Focusing on Writing

Title: Destination (CD-ROM)
 Publisher: Edmark
 Platform: Macintosh/IBM
 Approximate Price: \$20
 Hard Disk Space: 2 MB (on Macintosh)
 Grade Level: elementary
 Summary: There are four volumes in this series to date. They can be integrated into the same parent program and a single story can use the graphics of more than one volume. These programs include sample stories, story starters and ideas, as well as beautiful graphics and fact books filled with information. All students can benefit from using this series to create their own stories.

Destination Castle
 Destination Neighborhood
 Destination Ocean
 Destination Rainforest

Title: Imaginator! (CD-ROM)
 Publisher: Hearst New Media
 Platform: Macintosh/IBM
 Approximate Price: \$20 (bundled with five other programs)
 Hard Disk Space: 10 MB (on Macintosh), does not require CD after installation
 Grade Level: elementary
 Summary: This program includes backgrounds and pictures. Students can also use images from photo CDs. They can record sounds and make slide shows. All students can learn to use this program, but younger elementary students will need some instruction on using the different parts of the program.

Title: My Own Stories/Storybook Weaver (3.5 inch floppies)
Publisher: MECC
Platform: Macintosh
Approximate Price: \$30
Hard Disk Space: 3 MB
Grade Level: elementary
Summary: These two programs are basically the same. They include backgrounds and pictures. They also include a reader program that can easily fit on a floppy disk with several stories.

I own all of the preceding programs and have used several in the classroom. Students tend to enjoy My Own Stories and Storybook Weaver, even though they do not have speech abilities. They are easy to use because they are simple programs with a few components in them.

The Discus books are easy to use; however, they do not keep students' attention. The books are smaller than screen size and do not have catchy graphics and sounds. Conversely, the Living Books capture students' interest through the use of children's voices and colorful graphics.

Although I did not evaluate reference materials, the Grolier Encyclopedia seems to be the encyclopedia students feel most comfortable with. The desired information is easy to locate, many entries include photographs, movies, or sounds related to the topic, and the information is easy to read.