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ABSTRACT

This guide provides a rationale and suggests activities for teachers in all subject matter areas to use in helping their students to write. Some of the activities described are interdisciplinary in nature and lend themselves to team teaching arrangements; other activities are suggested that support the integration of writing into given content areas but do not necessarily depend upon the cooperation across secondary departments. Writing activities for middle, junior high, and high school are suggested in the areas of the humanities, mathematics, science, driver education, health, home economics, industrial arts, music, physical education, and visual arts. Expository writing across the curriculum, the importance of prewriting, and interdisciplinary communication are also discussed for the upper grades. Elementary school writing activities are suggested for language arts, social sciences, science, mathematics, and special holidays. (AEA)

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**INTERDISCIPLINARY WRITING:**

**A GUIDE TO WRITING ACROSS THE CURRICULUM**

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Table of Contents

I. Overview . . . . . 1

II. Middle, Junior High, High School . . . . . 7

    A. Writing Activities In the Humanities . . . . . 7

    B. Writing Activities In the Areas of  
        Math and Science . . . . . 19

    C. Activities For Incorporating Writing  
        Into Driver Education, Health, Home  
        Economics, Industrial Arts, Music,  
        Physical Education And The Visual Arts . . . . . 25

    D. Expository Writing Across The Curriculum . . . . . 29

    E. Prewriting . . . . . 31

    F. Interdisciplinary Communication . . . . . 33

III. Elementary School Activities . . . . . 34

    A. Language Arts . . . . . 34

    B. Social Sciences . . . . . 38

    C. Science . . . . . 40

    D. Math . . . . . 41

    E. Special Days . . . . . 43

IV. Bibliography . . . . . 51

# I. Overview

The battle cry of those who would try to improve writing-competence in school and society should be, "Learn to Write; Write to Learn". The fanatics would have us emblazon this on every wall in every classroom. Just as we now believe that every teacher is a teacher of reading, we would like to foster the idea that every teacher is responsible for helping students improve their writing skills, not to do the job of the English teachers, but to do their own jobs better. For some teachers, it may not be easy to see how writing can fit into content area instruction or how it can help students understand the subject matter being worked with, but it is not impossible.

C. Day Lewis (1976) has expressed the slogan another way. "We do not write in order to be understood; we write in order to understand." That this is true in all subject areas is reinforced by E. Fred Carlisle, a guest editor of an English Journal issue devoted to discussing the interdisciplinary writing interest which can be shared by English and science teachers. "No matter how well a student understands a scientific concept or regardless of how well he or she may have done an experiment, unless that student can explain (or represent in some way) the concept or experiment clearly, something will be lost, and it may be that he or she does not, in fact, understand either the concept or experiment very well." (Carlisle, 1978, p.35-36.) Some may say that this is fine for science, but it doesn't apply to physical education

on home economics. Yet even here there is much writing that could be done. "Teachers of physical education could help to meet public demand for cardiopulmonary resuscitation training in the schools by assigning essays on the subject, while teachers of home economics might set their students to writing cookbooks." (Fadiman and Howard, 1979, p.114.)

This guide provides a rationale and suggests some activities for teachers to consider as they work together in all subject matter areas and share the responsibilities of helping their students to write. Some of the activities are interdisciplinary in nature and lend themselves to team teaching arrangements in which English/language arts teachers join with teachers from other disciplines to teach thematic units in the humanities, creative arts, science or social sciences. In such arrangements, the teachers would cooperatively plan and carry out instruction in ways that would help them learn about each other's discipline as well as provide learning from an integrated rather than an isolated perspective.

Other activities are suggested that support the integration of writing into given content areas but do not necessarily depend upon the cooperation across secondary departments.

Although this guide may seem more appropriate for middle and secondary school teachers than elementary, special care has been taken to think about activities that are appropriate for each level of schooling as well as across the curriculum. Too often in the process of teaching, we all forget that we must be about "getting students to integrate writing into their everyday intellectual activities; because only when it is a common tool for thinking and

understanding experience does writing improve. . ." (Dworak[*in Brown,*  
1977, p. 82].)

SOME NOTABLE QUOTES ON THE INTEGRATION OF  
ALL CURRICULA, LITERACY, AND WRITING

"Thinking and creating in science, the arts, and mathematics is not that different. Scientist and artist alike try to understand aspects of reality, to conceive of important problems posed by life or the world and then to bring all their human faculties, intuitive as well as rational, to bear upon producing a solution or creating an explanation or embodying a thought or a feeling. They may focus their attention upon different aspects of reality, but their ways of thinking are not radically different. There are mathematicians whose thoughts are essentially poetic and poets whose words are mathematical. There are degrees of intuition, rationality, boldness, caution, grandness, or meticulousness in all creative thinkers. The more schools separate areas of thought, the more they encourage young people not to think in any of them."

Herbert R. Kohl, 1976

"The teaching of literacy must be a school-wide concern, not just the responsibility of teachers of English. The call 'for every teacher a teacher of English' is one that has been issued frequently. Yet as often as not, the subject teachers have responded, not by teaching reading and writing, but by asking, 'Why don't English teachers do a better job?' It seems that everyone in the schools values literacy. . . yet by and large, few are willing to take on the responsibility for teaching it. Thus, English skills become locked into English courses, and students fail to see application in other courses. When asked to write in history, they promptly forget everything they ever learned and write badly;

when assigned science reading they struggle. Even in the elementary grades, where single classrooms and multi-subject teaching are common, the skills of English-vocabulary, reading, penmanship-- have been allowed to drift off into isolated components.

Stephen Judy, 1980.

"Teachers of history, geography, science, mathematics, business and technical courses, home economics, physical education, music, art and other subjects need to become more aware of the interlocking relationships of language and thinking, questioning, and responding. The dominating belief and temptation is to leave the teaching of language to the English teacher."

Ken Styles and Gray Cavanagh, 1980.

## II. Middle/Junior High, High School

### A. WRITING ACTIVITIES IN THE HUMANITIES

A humanities/English program can be taught under almost any heading, with different emphasis depending on the teacher's specialties. A history or music teacher need not be a specialist in English to assign (more) reading and writing in his/her courses; the teacher needs merely to bring knowledge of the field to the class and channel it through reading/writing. Similarly, though the English teacher obviously must have at least rudimentary understanding of the arts and history in order to teach humanities, s/he need not feel handicapped by lack of a specialized degree outside the English discipline. The task of the English teacher is to help students probe and understand language as it is used in the humanities, not necessarily to teach history or art. Literacy can be taught anywhere it is needed, though it is obvious that interdepartmental and interdisciplinary cooperation makes teaching both the subject and the language easier."

Stephen N. Judy, 1980

We have to acknowledge, without question, that language skills are necessary for understanding and interpreting the knowledge acquired in history, art, music and literature. Writing requires substance, and the content areas provide a wealth of ideas. They are interdependent! The English teacher should be willing to use history and social studies content along with

literature and basic English skills materials. At the same time the history and social studies teacher should be open to the possibilities that are available through the integration of their content with that of English.

## THE ENGLISH TEACHER

"As Wendell Johnson said, you can't write writing. You have to write about something. . . The meaningful study of language, in other words, must be about the relationship of language to reality, whether the "subject" is history, politics, biology, religion, war, or anything else.

Neil Postman and Charles Weingartner, 1969

Following are some suggestions for the integration of the humanities with English.

- Have a supply of paperbacks, magazines and newspapers. They can be used as supplements to textbooks. Comparative writing can take place in both social studies/history and literature.
- When the students write, make the purpose clear and as real as possible. Help them find interesting things to say; then guide them through the writing structures. If the assignment is of interest to the students, they will be motivated to explore the language they need to communicate with their audience.
- Have students write stories and plays as well as essays and tests. They can criticize films, literature and factual articles. Writing poetry can be part of history as well as English.
- Explore the ways language is used in society for persuasion and communication of information.
- Explore the drama in both student writing and literature by perceiving literature as a dramatic exchange, first, among characters or ideas on the page, and second between the writer and the reader.
- Provide audiences for student work, using school and local news-

papers and magazines such as Scholastic. Make a class book of a given assignment. Encourage oral and dramatic readings of their writings. Making their writing public is important because it stresses the sense of the language and its use.

-Treat the students writing as part of the literature of a class. While they are not Faulkners or Hemingways their writing is made up of self-involvement--emotions, ideas, words--and it deserves a serious response.

-Assign history/social studies reading and writing in English class.

-Develop an interdisciplinary consultant system. When a teacher is about to give a test or assign a paper, encourage consultation with other teachers for ideas on how to make the assignment one that encourages good student writing.

-Send students outside the school on assignment to see language as it is actually used in non-school situations. Encourage them to write from their own experiences and observations.

Source: Judy, Stephen N., The ABCs of Literacy. Oxford University Press, 1980.

## THE HUMANITIES TEACHER

"The study of the humanities must be far more than a smattering of names, dates, great words, and the basics of arts and history. It must . . . include the individual student. . . We experience the world; we explore the self; we communicate with others about the self. In composing, mankind has chosen many different forms and media: carving on cave walls to record events; telling myths and legends to explain the unknown; writing poetry and stories; creating pop songs and films. . ."

Stephen N. Judy, 1980

The suggestions following are some ways teachers of other subjects, particularly history and social studies, can become involved with the composing process.

- Include appealing fiction and non-fiction books related to your subject.
- Coordinate with the English department and teach the writing skills required for your subject.
- Give creative writing assignments such as short stories, magazine articles, plays, slide, tape presentations, or an outline for a TV special.
- Make your assignments come alive by emphasizing the purpose and providing real audiences. Write to somebody (each other, outsider, relative, a business) for a purpose--to persuade, to teach, to explain.
- Keep journals--jot down observations and reactions to speakers, films, and readings.
- Assign interviews. They provide for a wide range of English skills:

oral language, thinking and synthesizing, which in turn provide for the writing skills: transcribing, writing and editing.

-Send student writing to be published in school or local newspapers, or make up a class book of a particular assignment.

-Create a guide to writing in your field. Then duplicate it for next year's students.

-Explore the literary forms connected with your subject--novels, short stories, plays, dramas. Bring in literary works by your subject-matter people such as John Kennedy and Winston Churchill.

-Study the origins of specialized vocabulary. Compare popular and technical language use.

"Translate" textbook studies into language that can be grasped by younger children.

-Write from experience; investigate topics of current concern; research contemporary concerns and issues.

15

## CROSSING BOUNDARIES IN WRITING - The Unit or Theme

The unit or theme provides a way of organizing, and synthesizing the materials from a variety of subjects in the humanities. As a result some natural bridges are formed. The themes below, however, include only those activities that would involve writing skills.

### The Roaring Twenties! Have the class:

- Move from observation to words, using an educational photograph set.
- Research the history, art and music behind the subjects of the photographs, then use the material uncovered to write stories, poems, reports and articles.
- Create titles for the photographs.
- Make comparisons contrasting their points of view.
- Create imaginary dialogues.
- Note sensory impressions in journals.
- Use a sequential series of photographs to create a story.
- Create a handbook of events and names year by year.
- Read and analyze the best sellers of the day, such as Sinclair Lewis' Main Street, F. Scott Fitzgerald's The Great Gatsby, or Horatio Alger's Ragged Dick.
- Prepare an in-depth project report, film or slide and tapes.

### Westward Ho! Have the class:

- Simulate a trip west back in the 1800's.
- Research, analyze and synthesize the materials uncovered in history, taking notes, making outlines and writing reports.
- Create posters to attract settlers.
- Write trail guides--sent from those already there.

- Keep diaries along the journey.
- Compose letters to those back home.
- Write business letters for necessary supplies to be sent.
- Create Tall Tales.
- Create poems responding to what they see along the way (introduce narrative poetry).
- Write plays about the hard life out West.
- Write imaginary biographies of lesser known heroes and heroines.
- Compose short stories about the trip as well as life on the frontier.
- Create a small town newspaper.
- Write how-to guides for building a house or planting a small farm.
- Summarize the westward movement in booklet form.

Personal Exploration Have the class:

- Read popular, personal experience books.
- Explore memories from early childhood, including historical events.
- Explore current concerns--related to themselves and the world.
- Respond by writing: short plays, short stories drawing from personal experiences, personal poems, letters to a close friend, dialogues involving a common experience, autobiographies, modern myths, and proverbs.
- Create filastrips and tape recordings with dialogue.

Human Relations (Friends and enemies, youth and age, conflicts, family relationships, rebellion)

1. Historical perspectives (e.g. WW II). Have the class:

- Develop outlines in order to understand the chronology of events.
- Write summaries of articles read.
- Write reports on people, places and events.

2. Literary involvement using such books as The Lord of the Flies,

A Separate Peace, Romeo and Juliet, The Outsiders and others.

Have the class:

-Write plays.

-Create short stories.

-Compose poems of conflict.

-Make up letters to and from the characters involved.

-Write dialogues of their own conflicts.

-Try literary analysis.

3. Bridges--How They Affect Humanity Have the class:

-Read works like: Michener's, The Bridges at Toko-Ri, Gie's, Bridges and Men, Boule's, Bridge Over the River Kwai.

-Research famous bridges and write reports which include investigation into function, history, aesthetics and construction.

-Listen to music that could inspire poetry: "Bridge Over Troubled Waters", "Ode to Billy Joe."

-Create a multi-media presentation involving bridges in the area of the school or state: photography with descriptions, original short stories, original poetry, and script writing and editing.

## FURTHER ACTIVITIES FOR WRITING ACROSS THE HUMANITIES

Have students:

-Invent a new product, then...

Write a philosophy for their new service.

Create a business name and logo.

Write advertisements.

Design packaging.

Write jingles.

Write job descriptions.

Write contracts.

-Write articles for a newspaper from two different approaches--  
straight news reporting and sensational (writing in the style of  
"yellow journalism"), using events that happened in the past.

-Create travel brochures and landmark guides.

-Write a gossip column about celebrities at a specific time in  
history.

-Prepare questions for an interview with someone who lived during  
a particular historic period, or who understands a current issue.

-Keep a values notebook--made up of values they hold or which others  
hold--things they hear, pictures they see--including values they  
discover that are both like and different from their own.

-Combine a word and photo essay on current key figures who have  
influence in the world today.

-Write issue-oriented editorials.

-Write letters to the editor on current, local or national issues.

-Write poetry using history, social studies or art as the subject  
matter.

- Keep a diary as though they were a character during a particular historical period.
- Create posters for some issue, or historical event.
- Write modern myths.

Teachers who are interested in thematic units in the humanities may wish to examine the following publication available from the National Council of Teachers of English, 1111 Keynon Road, Urbana, Illinois 61801:

Thematic Units in Teaching English and the Humanities

Sylvania Spann and Mary Beth Culp, editors  
Committee on Thematic Units (1975, 208p.)

These 15 unit plans focus on getting students involved in English the way they are involved in life--questioning, reflecting, probing, wondering, and sometimes rebelling. The plans are designed so that students use all their language skills as they learn values and critical thinking. Included are units on death, the speaking voice, the search for self, rural culture and folklore, the poetry of work, "how to eat a poem" (an introduction to poetry), utopias, kinestasis: an introduction to filmmaking, heroes and heroism, mass media and the representation of life, the individual conscience vs. established authority, science fiction and the creation of tomorrow, the occult, growing old, family life, and the literature of sports.

Published in a loose-leaf format and available with or without 3-hole binder, Thematic Units will accommodate the teacher's own materials as well as additional units forthcoming. Each unit

includes an overview, general objectives, notes on evaluation, list of materials needed, daily lesson plans, suggested related activities, supplementary reading, bibliography, and selected teaching materials for use in class. The 15 units are sold as a set.

Thematic Units in Teaching English and the Humanities

First Supplement (1977, 85p.)

Five additional unit plans supplement the fifteen units included in Thematic Units in Teaching English and the Humanities. The additional units deal with divorce, the Exodus theme in black American literature, male/female roles in literature and the media, the New Journalism and the student voice, and speculation about life on other planets.

## B. WRITING ACTIVITIES IN THE AREAS OF MATH AND SCIENCE

"To begin with, science and literature are both products of the human mind; they are simply different ways to predict the future." (Cunningham, 1966) We can broaden this statement to say that they are also ways to explain the past and comment on the present. Science and literature are not two discrete entities; they are, rather, two ends of a continuum. They both need words to record what they perceive, to classify, to theorize and to verify, and teachers need to show a particular field.

### Vocabulary

In many cases, vocabulary can be a problem for the student. Words can have a specific meaning in science or math that differs from the more general meaning the student has learned before (e.g. cell, force, set). Or the word may be specific to science or math, and thus be new for the student (e.g. genera, isosceles). This means that the teacher must provide clear instruction on the vocabulary needed and sufficient opportunity to practice, use, and master it. To do this, a teacher could encourage a cumulative dictionary of the words of a unit by having students:

- Make a dictionary of the words, defined so that they could be understood by someone outside of the class.
- Make signs, posters, or ads using or telling about the words.
- Write a poem using at least ten of the vocabulary words.
- Write couplets as mnemonic aids.
- Make a list of vocabulary that are metaphors; starfish, sea cucumber, s-curve.

## Description

E. Fred Carlisle, writing in the April 78 issue of The English Journal points out three approaches a scientific writer may use to describe something.

1) The writer may choose to write an "objective" description, so that the reader can visualize clearly the color, size, shape, and so forth of the thing being described.

2) Using a creative approach, the writer may compose an impressionistic account that gives the thoughts and feelings stimulated by the object.

3) Or, again creatively, the writer may do a narrative based on the thing being described that indirectly provides a description of it. The teacher can point out the different effects achieved, and provide opportunities for students to:

-Write poems, or personification stories about the thing being described.

-Observe an insect or animal closely. Write a careful account of its actions and tell the account in story form for a younger child.

-Write news articles for the bulletin board, the school newspaper, or the local newspaper, describing recent class work or experiments, remembering that audiences differ in their knowledge of the material and making adjustments.

-Grow crystals and write crystal-shaped poems describing them. Describe other things, such as fish, flowers, or triangles, in the shape of the thing being described.

-Write descriptions of things in the room, or seen on a field

trip, without naming the thing being described, then see if other students can identify it.

-Try to describe something in terms of only one sense--taste, touch, sight, sound, smell, and describe which is easiest to use.

### Reports

Much writing in the math and science areas involves reporting on a process. Such activities as describing an experience performed or observed, or explaining a mathematical process being used, require clear, accurate, and complete descriptions of the actual event, in proper order. This writing does not reflect the writer's hopes or feelings, but rather the actual events. The teacher can be of great help by presenting and discussing acceptable models of this type of writing, and requiring that these standards be met. Robert Graves, in his article "Balance the Basics: Let Them Write," quotes a student: "I learned to write in a chemistry course in high school. The chemistry teacher was a stickler for accuracy and economy. Writing up lab reports was really disciplined writing. I began to see things differently."

Math and science teachers can have their students try:

- Writing out the process of solving a math problem.
- Giving directions for drawing geometric figures.
- Making up a story problem that fits the mathematical statement.
- Making up a math game and writing directions for playing it.
- Writing directions for making a bug-catcher, or preserving animal tracks.
- Writing myths that explain how storms or other phenomena develop.

and contrasting this with a factual explanation of the process.

-Writing a single-concept booklet for a younger child that explains a process, realizing that adjustments in vocabulary and amount of detail will have to be made.

-Planning a film-strip/tape that shows the process.

### Research Reports

One weakness that frequently occurs in science writing is most obvious in research reports, which can become mere copying or rephrasing of encyclopedia entries. Judy, in The ABCs of Literacy, (p. 288) offers three sources of information for scientific reports:

1. Human resources, such as asking an operator of a magnetic crane, a meteorologist, or a worker in an electronics firm about magnets and magnetism.
2. Experimental sources, or lab work.
3. Reading sources.

Using all of these, instead of just the last one, tends to avoid mere regurgitation of the encyclopedia information. Students who, because of the subject of their report, are limited to that last source will have to be shown methods of gathering information that involve multiple sources, and the technique of interrelating the resultant facts. Students could:

-Practice writing up interview questions they might ask in gathering material.

-Write short stories that contain the information of the report.

-Write an introduction for a book, condensing the information so that it's understandable to the average reader.

- Write a creative story or play from the point of view of the subject of the report.
- Write the report in poetic form.
- Extend the report by predicting what will happen in the future, based on the information in the report.
- Plan a campaign of social protest, or legislative action, in reaction to the information in the report.
- Prepare a filmstrip or video-tape of the information.
- Write a script for a TV documentary on the subject.

#### Adjusting for Audience

Because of the more technical vocabulary that occurs in math and science classes, it is important to be sure that the students are considering the audience they are writing for. Students should have practice, in all forms of writing, in adjusting what they write to the level of scientific or mathematical knowledge of their audience. Students should also learn to apply to their writing what Klausen (p.73) refers to as the Mulholland Test: Can a typical reader in the group they're writing for understand what they wrote? (Klausen used a custodian named Barney Mulholland as his sounding board.) Students can practice adjusting for audience by:

- Writing up the description of an activity in class for two different audiences, for example, the teacher and the local newspaper.
- Writing a description of the course for students who would be taking that course the following year.
- Making single-concept booklets for students in a lower grade.

Teachers especially interested in the teaching of scientific writing should examine The English Journal, April, 1978. The whole issue is devoted to a discussion of the mutual concerns and interests of English teachers and science teachers.

Feature articles included are

"Teaching Scientific Writing Humanistically: From Theory to Action."

"Scientific Writing: One Scientist's Perspective."

"Putting Context into Mass Media Science Writing: A Journalist's Perspective."

"But I've Never Taught Scientific and Technical Writing Before!"

"Integrating Science and Writing: a Biology Instructor and an English Teacher Get Together."

"Science Writing: Who? What? How?"

Teaching ideas include:

"Science in the English Classroom?"

"Two Technical Writing Assignments."

"Literature Through Science: Catalyst for Writing."

"The Mulholland Test for Understandability in Popular Science Writing."

"How to Invite Technology into the Classroom Without Putting Poetry in the Corner."

27

### C. ACTIVITIES FOR INCORPORATING WRITING INTO

#### DRIVER EDUCATION, HEALTH, HOME ECONOMICS, INDUSTRIAL ARTS, MUSIC, PHYSICAL EDUCATION AND THE VISUAL ARTS.

Writing opportunities can be created in every discipline. All fields of study offer impressions and create reactions that can be expressed in words. Though we have categorized activities by subject, we recommend that you read all sections since many ideas could be adapted and used in your area.

#### DRIVER EDUCATION

Have students:

- Write a description of a traffic violation or accident they witnessed.
- Practice filling out accident forms.
- Write a paragraph arguing the necessity of certain laws (e.g. "The 55 M. P. H. Speed Limit Should Be Changed").
- Write "tests" for their peers with statements taken from the textbook or State Motor Vehicle Manual.
- Write new traffic laws and justify their passage.
- Research the history of a traffic sign or signal in their neighborhood--  
How long has it been there? How do residents feel about it?
- Interview Driver's License Examiners with questions brainstormed in class (e.g. What advice would you give to 16 year olds taking their first driver's test?) and write a "Guide For Taking Your First Driver's Test."

## HEALTH

Have students:

- Create a questionnaire and interview their peers about drug use--  
nicotine, caffeine, alcohol, marijuana, etc.
- Keep a list of everything they eat on a given day and analyze it  
in terms of nutritional value.
- Write the directions for first aid procedures.
- Interview someone in the health profession about a topic of  
student interest.
- Write a directory of diseases that affect members of their age  
group, and describe the symptoms and treatments for each.

## HOME ECONOMICS

Have students:

- Write clear directions for a process in clothing or foods (e.g. "How  
to Hem a Skirt," "How to Fry a Hamburger").
- Plan a nutritionally adequate and interesting diet for a teenager.
- Write reports on sources of vital nutrients, fibers or resources.
- Use activities involving learning the vocabulary of parts of a  
sewing machine, types of cooking utensils, or ways to cut vegetables  
or meats.
- Write stories for children in a child-care unit.
- Write letters--of invitation to a meal.  
--to get information for a report.  
--on consumer problems.
- Interview other students about their household responsibilities.
- Write skits of family situations for a family living unit.
- Plan informational posters.
- Write a script for a fashion show.

- Do a research paper on the clothing of foods of different cultures or groups.

### INDUSTRIAL ARTS

Have students:

- Write clear directions for a woodworking procedure (e.g. "How to Build a Bookshelf.") and compile them into a "Guide for Handmade Furniture."
- Explain some technique in terms that a beginner could understand. (e.g. "How to Wire a Lamp.")
- Prepare safety manuals and/or posters for the shop classroom.
- Prepare a sales campaign for a class project.
- Write the story of how a class project was completed (e.g. "From Spark Plugs to Exhaust System: The Story of a Rebuilt Chevrolet Engine" for publication in the student newspaper, district newsletter, local newspaper or national magazine.)

### MUSIC

Have students:

- Write "word pictures" that music "paints."
- Compose advertisement jingles.
- Write down feelings and ideas while listening to music.
- Write a musical comedy as a class activity.
- Research an instrument.
- Write a radio interview with a composer.
- Critique musical performances attended.
- Write original lyrics for music.
- Compose poetry to music.

## PHYSICAL EDUCATION

As students watch a basketball player, gymnast, or runner, they can observe the play of muscles, the pleasures, pain and the pressures of competition; the emotions, rhythms and sounds of athletic activities. Then they can express these in written form in some of the following ways:

- List impressions or collect descriptive words.
- Write announcements.
- Write sport reports and newscasts.
- Create original cheers.
- Write acceptance speeches.
- Design sports awards.
- Compose original school songs.
- Write poetry and character sketches.
- Plan questions and write sport interviews.
- Rewrite the rules for their least favorite sport.

## VISUAL ARTS

Have students:

- Write poetry or tales about the mask-faces they make.
- Create a story or poem stimulated by a wet watercolor, melted crayon, smeared chalk, or oil swirl painting.
- Write lies, tall tales, riddles, poems and stories about paper-sculpture animal creatures.
- Design ecology posters or bumper stickers after making junk sculptures.
- Create limericks about vegetable creatures.
- Create a comic strip.
- Write biographies with portraits.
- Write "me-poems" or autobiographies, illustrated by silhouettes or personal collages.

#### D. EXPOSITORY WRITING ACROSS THE CURRICULUM

Students often have difficulty organizing thoughts and information in paragraph or essay form. They seem unable (or unwilling) to include enough information to support their position, or they use irrelevant information. Barry K. Beyer in an article entitled, "Teaching Basics in Social Studies," cites a clever, appealing way to show students practical ways to organize their ideas in writing. It is called a "hamburger essay."

A well-organized paragraph can resemble a hamburger. Such a paragraph has a top roll, the topic sentence, which states the paragraph's organizing idea. It also has a bottom roll, a sentence which wraps up the paragraph by summarizing what the paragraph attempts to communicate. The "meat" of the paragraph consists of the information presented to explain, clarify, exemplify or support this main idea. The details and examples used to explain the facts correspond to catsup and other condiments which make the meat of a hamburger more tasty. An essay thus becomes an extended paragraph, just as a hamburger enlarged becomes a "Big Mac." Each segment or paragraph is separated from the next by a transitional sentence.

Another way teachers can help students improve their writing involves the use of more precise directions when giving writing assignments. Specify exactly what it is you expect students to do. Words such as state, describe, explain, compare and tell are often used to direct a-writing activity. A teacher can also specify the number of ideas to be made or discussed in an assigned paragraph or essay. "Describe three causes of the Civil War." is more useful

to a student than "Describe the Causes of the Civil War." And finally, a clearly understood system for evaluating paragraphs or essays can help students organize their writing. For example, a teacher could establish a policy that every five points requires a statement of a major idea, an example of the idea related to the topic, and an explanation of how the idea is significant. Thus, in a fifteen-point essay on three causes of the Civil War one would expect to find statements, explanations and examples of each of three major causes of this event.

This system guides students and also allows objective evaluation of their writing. For each correct statement of a cause, award two points, for an explanation another two points, and for an example another point. This method actually helps structure the students writing and can also be applied to the "hamburger" structure. A teacher might allow ten points for a typical paragraph, awarding one point each for an introductory and concluding sentence and four points each for two "meaty" ideas—divide each set into two points for the statement of the idea, one for an explanation, and one for an example relevant to the topic.

## E. PREWRITING

Though the curriculum may require students to write research papers or reports, there is often little time assigned for prewriting, activities that motivate students and help them discover topics and audiences to write for. Nancy Dworsky in Free Writing! A Group Approach offers some exercises that could become part of students' daily intellectual activity and give them practice for longer writing assignments:

Have students engage in ten minutes of free writing either in the middle of what is a lifeless discussion, or toward the end of a lively class discussion. Encourage students to react personally, comment or summarize what is or was being discussed. Collect and share some of the reactions.

In order to clarify student attitudes toward and knowledge of a particular topic before it is introduced as a unit of study, have them spend fifteen minutes writing their reactions to a statement about the area to be considered (e.g. Before a unit on "Population" have students react to a statement like "Hunting Should Be Restricted In This State" or precede a unit on "Planets" by getting written reactions to open-ended statements like, "If I were forced to move from Earth, I would choose to live on \_\_\_\_\_ (name of planet), because \_\_\_\_\_.")

Another method is to assign a piece of writing on a particular topic to be completed by the end of the class period. The writing is to be the students' response, impressions, feelings or an anecdote from a personal experience or a fantasy--anything, but it

must be personal and informal. Using life cycles as the topic to be discussed the next day, have them write up an experience with birth or death. The object is to help them focus on the topic personally, not abstractly. Students who are willing could share the writings in groups or with the teacher.

Activities like these can help clarify thoughts and provide experience in using writing as a tool of thinking. The work should be shared whenever students are willing to do so and should receive feedback from class members, though grades and formal evaluation should be reserved for the research papers and reports that follow these prewriting activities.

## INTERDISCIPLINARY COMMUNICATION

In order to successfully implement an interdisciplinary approach to writing, open communications are a must. We suggest that you try to discover the commonalities that you have with other teachers and develop interdisciplinary teaching times when teachers from different subject areas and/or grade levels can work together. At the secondary level this might result in new interdepartmental courses—"Writing About Nature" (science and English), "Wo/Man, The Incredible Machine" (biology, physical education, health, and English), "The Art of Bookmaking" (art, industrial art, and English) are only a few possibilities. Staffs could arrange temporary interdisciplinary teaching times for a particular unit. Content area teachers could work with English teachers on student term papers, for example.

The ideal situation would permit teachers to meet each week or two to discuss writing in their classes and a school or district administration committed to improving student writing would schedule this time if enough teachers demanded it and could justify its usefulness. An interdisciplinary approach is the ideal system for fostering continued staff development, cooperation, peer support and understanding.

### III. Elementary School Activities

The elementary teacher is in an ideal situation for integrating writing into the content areas. We feel it is both important and necessary that this integration occurs. Many times transfer of knowledge from one subject area to another does not take place. Writing in the content areas is one method of helping children to make this transfer.

Keep in mind that one needs an audience for one's work. Children tend to be more inspired if they know their work is going to be read by others. We have collected ideas for content area writing projects. The lists are by no means exhaustive and ideas listed under each heading are not to be confined to a specific content area.

#### A. LANGUAGE ARTS

1. Use spelling words to make rhyming groups. Make and illustrate a rhyming book.
2. Find synonyms, antonyms, homonyms for spelling words.
3. Create sentences using a spelling word and a synonym, antonym, or homonym.
4. Make a picture dictionary of vocabulary words.
5. Develop a glossary of spelling words.
6. Make up Word Find puzzles for current spelling words, or for vocabulary words in any content area.
7. Make a list of descriptive words. Divide them into categories

of words with positive and negative connotation.

8. Write dictionaries of antonyms, homonyms, synonyms, prefixes, suffixes, compound words.
9. Make lists of compound words. Create new compounds.
10. Make lists of nouns or verbs.
11. Write a story using rebuses.
12. Extend stories students have read.
  - a. If they read a story about world records, have them write about a world record they would like to set.
  - b. If they read a story about someone being afraid of something, have them write about a time when they were afraid.
13. After doing a play, write letters inviting another class to see the play.
14. Do lessons for learning letters of the alphabet.
  - a. Make a banana shape. Fill it with "B" words.
  - b. Paint a picture of a red rose. Write a phrase to match the picture.
15. Read a story to the class, but do not read the ending. Have the students write an ending. Compare.
16. Write a glossary for the reading book/text.
17. Make pictures of words that begin with vowel sounds. Example: apple, egg, Indian, octopus, and umbrella. Now write all about apples, eggs, ...
18. Write about field trips:
  - a. Follow field trips with an experience chart.
  - b. Write about new things you saw on the trip -- people, animals, shapes of buildings, etc.

19. Make hand puppets of characters from a well known story. Have several children rewrite the story. Present the puppet show to the class.
20. Make your own readers. Have children tell you words they would like to learn. Add them to the reader. Illustrate. Read each day.
21. Make a thesaurus.
22. Write a fable.
23. Make a book, including the addresses and telephone numbers of your classmates.
24. Practice filling out various types of order forms for magazine subscriptions, catalog orders, etc.
25. Research and write up lists of rules to follow in any type of emergency at home, play, school, car, in a fire, tornado, flood, etc.
26. Redesign familiar signs, such as a stop sign, pedestrian crossing, or railroad crossing.
27. Create telephone yellow pages on the skills, abilities and hobbies of your classmates.
28. Create new labels for cans of food.
29. Make a map of your school. Turn the halls into streets, rooms into houses and stores, etc.
30. Write up recipes for things other than food, such as love, happiness, good study habits, etc.
31. Write warranties for common classroom objects, such as a pencil or notebook.
32. Practice taking telephone messages.

33. Make a list of appliances in your home.
34. Transcribe conversations into written form.
35. Rewrite newspaper articles.
36. Write up your own work contracts.
37. Write a commercial using persuasive words.
38. Write the first or last names of the students in the class in alphabetical order.
39. Create your own comic strip.
40. Create a class magazine which includes poems, jokes, stories, ads.
41. Show an interesting photograph, picture, or painting. After children write about it, compare students' impressions.
42. Retitle books, experiments, chapter titles, seasons, feelings, days of the week, mood words. (The list is endless.)
43. Write about a famous person of the past, an explorer, a scientist, or a TV star.
44. Write thank-you letters to people who have done something nice for you.
45. Create a birthday card for other classmates.
46. Write a class constitution and class rules.
47. Write outlines.
48. Write to pen pals.
49. Write slogans for bumper stickers.
50. Develop travelogues and pocket travel guides.
51. Write captions for pictures.
52. Write song lyrics.
53. Create your own books.

54. Keep a calendar or diary.
55. Write telegrams.
56. Write up show-and-tells into article form.
57. Write directions to make or do things, to travel, to play a game.
58. Write an advertisement full of facts, or full of opinions.
59. Create a Dear Abby. Exchange with a friend and write answers to each others' problems.
60. Make a list of the sounds you hear for two minutes at different times of the day.
61. Write a letter to a sick classmate telling about what is happening at school.

B. SOCIAL STUDIES

1. Write weather reports.
2. Write news articles, for school or local newspapers.
3. Keep a log of events in the classroom.
4. Write a book report on supplementary social studies reading.
5. Write letters for free information on a topic of interest to the student.
6. When studying about various places in social studies, write stories as if you were there.
7. Write letters to historical figures from social studies units.
8. Have weekly/bimonthly opinion poll about something studied.
9. Analyze advertisements from magazines, TV, newspapers, radio. Critique them.
10. Write to agencies that deal with endangered plants and animals. Ask how we can protect our wildlife.

11. Find an interesting-looking landmark in or around your school and create an interesting story about it.
12. Compose a community directory listing names, addresses, and phone numbers of various community agencies and resources.
13. Write fictitious diaries for characters studied in history.
14. Write editorials on current issues.
15. Write summaries of encyclopedia articles.
16. Compose eulogies and epitaphs.
17. Write glossaries of terms, names, events, and places being studied.
18. Write jingles and slogans for your favorite products.
19. Write birth certificates for yourself, classmates, and famous people.
20. Write newspaper headlines for events in the past.
21. Write biographies of famous persons.
22. Make time lines.
23. Prepare interview questions.
24. List your skills, abilities, hobbies, and faults.
25. Make a list of occupations. Write about a job you may like to have.
26. Write about how we can help other people in a specific emergency, such as a storm.
27. Write about ways we can be ecological in our homes and schools.
28. Make a list of unpaid services you perform for others.
29. Research foods eaten in various countries. Write a report comparing them to the foods we eat in America.
30. Research and report on clothing needs for different climates.
31. Make a travel brochure of places to visit in your community.

32. Write letters to public services and agencies inquiring about the services they perform.
33. Make a dictionary of common abbreviations--states, professions, titles, streets.
34. Create an imaginary family. Write up a budget this family must follow based on a given income. Vary the income and rewrite the budget.
35. Make a list of ways to spend leisure time.
36. Make a map and key of your classroom, school playground, home, or room.
37. Research an ethnic group. Report on contributions they have made.
38. Write a list of commonly found sex-role stereotypes.
39. Research the history of the flag. Write what it now means to you.
40. Write about what "freedom of speech" means to you.
41. Make a list of your responsibilities to pets, family members, self, classmates, or community.

C. SCIENCE

1. Write a report indicating essential elements in a scientific process. Select a process. Using key words, from each step in the process, list a chronological sequence of events. Write what happens if all the steps are followed correctly.
2. Write what could have happened if a particular step were changed.
3. Write a book report on a supplementary science book.
4. Develop a glossary of science terms.
5. Record minute, hourly, or daily changes in a science experiment

or observation such as a hatching egg, an ant farm, an aquarium.

6. Do sensory writing. Write what each sense does. Tell what it would be like to be without one sense.
7. Create a pamphlet based on something studied in science.
8. Write fact and opinion statements about a science experiment.
9. Record the weather and compare it to an almanac prediction.
10. Create your own farm's almanac.
11. Research and report on famous people in the scientific field.  
Draw a time line and date their discoveries.
12. Based on what foods people need to consume each day, write up menus for your family.
13. Write up a schedule for caring for classroom pets or plants.
14. Write newspaper articles based on science experiments.
15. Write poems about parts of your body.
16. Write stories about prehistoric animals.

D. MATH

1. Write imaginative story problems. Exchange with a classmate and solve.
2. Make a grocery list for your family. Calculate the total cost, subtracting amounts for coupons and bottle deposits.
3. Take an imaginary trip to Disneyland. How much money will you need for rides, treats, and food. Don't forget your admission fee!
4. Keep a class checking and savings account.
5. Keep a glossary of math terms.
6. Design crossword puzzles using math terms.
7. Write (in words) a complex math problem. Have a friend solve it.  
Example: Add seven and ten; add two more; take nine away from

the total; now multiply by two. What is your answer? (twenty)

8. Using old catalogs, decide how to spend \$20. Complete the order blank.
9. Create a story about what life would be like if we had no numbers.
10. Write a story about a friendship between addition and subtraction.
11. Write a poem using as many math terms as possible.
12. Write a speech that tries to persuade someone that math is the best subject.

## E. SPECIAL DAYS

Many teachers at the primary level organize content areas themes around special days. Studying holidays can stimulate student writing. The following writing activities can be used for special days.

### September

#### Labor Day

Research the background of Labor Day. Have each student write about what Labor Day means to him. Combine into booklet.

#### First Day of School

- Invent a new school subject. Write about it.
- Write about a new school holiday.
- Write about a visit to a school of the future.
- Write up classroom rules. Post them.

#### First Day of Fall

- Write a limerick using words you associate with fall.
- Investigate legends about Indian Summers. Write about them.
- Find out why leaves change colors in the fall. Report on the process.

### October

#### Fire Prevention Week

- Create posters and slogans about fire prevention.
- Write a letter to the local newspaper explaining how people in your community can prevent fires.
- Write an article for your class or school newspaper on fire prevention.

- 26
- Write a letter to the local newspaper explaining how people in your community can prevent fires.
  - Write an article for your class or school newspaper on fire prevention.
  - Write a letter to your local fire department asking if someone could talk to your class. Make a list of questions to ask.
  - Study how methods of firefighting have changed over the years.

#### Columbus Day

- Write a play about Columbus' trip and the discovery of America.
- Pretend that you were on one of Columbus' ships. Write a log about your trip. Be sure to include your feelings.
- Write a thank-you letter to Columbus for discovering America.
- Write about how Columbus must have felt on his long voyage.

#### Halloween

- Write a scary story. Select someone to read it over the PA system or tape record it for a local radio station.
- Make up a story about the plants that would be in a witch's garden.
- Write an obituary for a witch.
- Write a letter to someone who has never heard of Halloween before. Explain to them what Halloween is.
- Write as many words associated with Halloween as you can.
- Learn about the growth of a pumpkin from seed to harvest.

Write up your research.

-Tell three different ways a pumpkin can be used.

-Describe a scary room you may find in a spook house.

### November

#### National Book Week - National Children's Library Week

-Write to favorite authors telling why you like their books.

-Make a collage of favorite authors and book titles.

-Write a thank you letter to your librarian.

-Learn how books are made. Report back to your class.

-Write a report on the Dewey Decimal System.

-Write newspaper headlines announcing Library Week.

-Write a different ending for one of your favorite books.

-Write about a favorite character, telling why you would like to be that person.

-Have 4th or 5th graders write a book for 1st graders. Use Dolch list for a controlled vocabulary.

-Display books written by children in the library.

#### Thanksgiving

-Compare Thanksgiving today with the first Thanksgiving.

-Write thank you notes to people who help in school--principal, aides, janitor, bus driver, librarian, volunteers.

-Write about a Thanksgiving Day that you spent away from home.

-Write a letter to a classmate telling what you are thankful for.

-Plan a Thanksgiving menu. Make a shopping list for it.

-Write a Thanksgiving puppet show.

## December

### First Day of Winter

- Make a list of words which describe snow or winter.
- Write a story about a snowflake who turns into a person.
- Make a list of winter activities.
- Write about your favorite winter month.
- Compare Fahrenheit and centigrade ( $^{\circ}\text{F}$  and  $^{\circ}\text{C}$ ).

### Hannakuh

- Research the meaning of Hannakuh and report on it to the class.
- Make a list of vocabulary words and meanings associated with Hannakuh.

### Christmas

- Write about what Christmas means to you.
- Make a list of items Santa will need in order to keep his elves busy.
- Investigate Christmas customs of other countries.
- After studying Christmas in other lands, write about where you would like to spend Christmas this year. Be sure to include why.
- Write about a Christmas tradition in your family.
- Make a list of words associated with the holiday season.
- Write a letter to Santa.
- Christmas is a time of giving. What can you give without spending money?
- Write creative ways in which you could change Christmas to make it better.

- Build a new toy. Write directions for putting it together.
- Write about what you would do if you were Santa Claus.
- Write your Christmas wishes. Nothing can be materialistic.
- Change the words to a Christmas song.

## January

### New Year's Day

- Write two or three important events that happened during the past year.
- Make a list of predictions for this year.
- Tell what you or your teacher could do differently for the remainder of the school year.
- Make a list of personal New Year's Resolutions.
- Make a list of classroom resolutions.
- Make a list of world resolutions.
- Read about the Jewish and Chinese New Year's.
- Write a story about a New Year's Ball.

## February

### Ground Hog Day

- Write a story about a day in the life of a ground hog.
- Investigate the history of ground hog day.

### George Washington's Birthday

- Write a letter to George thanking him for his contributions to our country.
- Write about the clothes people wore during Washington's time.
- Tell how you think George Washington felt being the first president.

### Valentine's Day

- Write a note to a secret valentine.
- Write a Valentine poem to someone you love.
- Write a Valentine play and perform it for others.
- Write about ways you can celebrate Valentine's Day.
- Make valentines instead of buying them.
- Have each child cut a paper heart. Write directions on it for another child to follow. Form a circle. Read and do. (ex.--act like a frog, bark like a dog, run, walk, stand. . .)

#### Abraham Lincoln's Birthday

- Write a thank-you letter to Abe for his contributions to our country.
- Investigate the life of Abe Lincoln. Report on one interesting aspect.

#### March

##### St. Patrick's Day

- Write a letter to a leprechaun.
- Find out what the Blarney Stone is.
- Research Ireland. Write some facts about this country.
- What would life be like without green? Write about it.
- Put a white mum or daisy into water. Add green food coloring. Watch it and write about what happened.

##### First Day of Spring

- Make a list of signs of spring.
- Keep a record of when you saw the first robin, insect, buds and flowers.
- Take a spring walk. Write about things you saw and heard.

##### National Wildlife Week

- Write about what you can do to preserve wildlife.
- Investigate an extinct or endangered plant or animal. Write about it.

### April

#### April Fool's Day

- Write an April Fool's Day note to someone.
- Make a list of April Fool's Day tricks.

#### Arbor Day

- Write a report on a specific type of tree.
- Make a chart displaying various kinds of leaves.
- List steps for planting a tree.

#### Easter

- List all the ways to use an egg. What do you think is the best way? Why?
- Write a play about "My Life as the Easter Bunny."
- Tell what the Easter bunny does during the winter.
- Write about life as a jelly bean.
- Make a list of vocabulary words you associate with Easter.
- Report on Easter customs in other countries.

### May

#### May Day

- Pretend you are a flower. Write about your life.
- Write a report on a garden of wild flowers.
- Investigate the history of May Day.
- Label the parts of a flower.

#### Mother's Day

- Write a note to your mother or to someone who has been like:

- a mother to you. Thank them for all they have done.
- Write about ways you can make your mother happy.
  - Write about what your mother does during the day.
  - List the things your mother does for you.
  - Create a Mother's Day card.
  - Put a word on each petal of a flower. Use these words in a story.

The UNICEF calendar has a list of "special days" which are less commonly known, but which will stimulate interest in other cultures.

This calendar and a resource collection of materials on children around the world are available from

United States Committee for UNICEF  
331 East 38th Street  
New York, New York 10016

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