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ABSTRACT

Illustrating Detroit, Michigan, teachers' own writing-to-learn activities, this manual represents the product of course work by middle and high school science and humanities teachers enrolled in a graduate course entitled "Leadership in Writing across the Curriculum." Sections of the manual include: (1) "Writing in Science Classes"; (2) "Writing in English Classes"; (3) "Writing in Math Classes"; (4) "Writing about Social Studies Content"; (5) "Using Writing To Learn To Improve Administration and Support Teaching"; (6) "Student Voices"; and (7) "Detroit Teachers' Plans and Concerns: Toward Dissemination of Writing To Learn throughout the Curriculum." Appendixes include a course description, an agenda for a panel program, a course evaluation report, a magazine article "A Partnership in Education," and a 32-item bibliography for writing to learn in the secondary school. (RS)

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Writing to Learn in Disciplines:

Detroit Teachers Combine Research and Practice in their Classrooms

**A Detroit Public Schools/University of Michigan
Collaborative Publication, 1991**

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DEDICATION AND DEFINITION

This manual is dedicated to Detroit students; it is illustrative of Detroit teachers' own writing-to-learn activities in their middle school and high school classrooms across the curriculum.

What is Writing to Learn?

Writing to learn refers to a practical, productive teaching strategy that encourages students to write regularly and informally from their own experiences, insights, and perspectives about subject matter across the curriculum. In fact, Writing to Learn is consistent with the educational movement referred to as writing across the curriculum (WAC); writing to learn calls attention to the why of writing and WAC calls attention to where (in every discipline).

How does writing to learn support teaching and learning? As you see from sample student writing in this manual, writing to learn motivates students to engage personally with course concepts, by employing discovery techniques and critical inquiry as well as through practicing creative problem-solving. Typical assignments ask students to blend experience from outside and inside the classroom, for example, combining differing media for expression or drawing upon first-hand evidence to support ideas; writing-to-learn assignments include: logs, field notes, journals, personal reflections, descriptions, definitions, story-telling, comic strips, games, puzzles, lists of questions, hypotheses, tentative conclusions, predictions, responses (to readings, lectures, films, television, neighborhood life, self, etc.), speculative free-writing, interviews, collaborative scripts, adaptations, and so on.

One important purpose of writing to learn is to help students enjoy learning; for the teacher, students' regular writing demonstrates steady, active engagement with course-related concepts. When students' writing, whether ungraded or graded, is gathered in portfolios, each portfolio becomes an impressive record of developments in their critical thinking about ideas raised in courses.

When writing to learn is promoted across the curriculum, it sends several messages to students: (1) your writing ability matters in every content area to every teacher, (2) writing is a valuable tool for teasing out and reflecting upon your thinking, (3) reading your ideas in writing helps you and your teachers promote understanding of course material.

Sharing writing-to-learn assignments among teachers in content areas stimulates discussion about encouraging students to use writing for exploration and development of their thinking; writing to learn can become a school-wide practice.

As educators, regardless of our content areas, we still know far too little about relationships for our students between writing and learning, reading and writing, thinking and writing, motivation and writing, cognitive growth and writing. Only if more teachers across the curriculum are both confident and supported in using varied kinds of writing for learning can we gain deeper insights into the important functions writing serves in students' continued intellectual growth.

**Barbra S. Morris,
Detroit Public Schools/
University of Michigan Collaborative
Project Director**

PREFACE

**Barbra S. Morris,
Project Director**

This manual doesn't stand alone; it exists because of a long history of many sustained, successful collaborative efforts that have linked the Detroit Public Schools with the University of Michigan. More specifically, this particular manual has its origins in an educational partnership dating back to 1985: a model academic writing program in Detroit's Mackenzie High School. The stated objectives of the original Mackenzie High School/University of Michigan Writing Project (MHS/UM WP) were to encourage students to write more often, more fluently and effectively, and more self-confidently; moreover, students in the MHS/UM WP were to be encouraged to "picture themselves" attending college as they experienced several special enrichment activities that linked their school with the University's campus. (The MHS/UM WP is more fully described in an article in the Appendix and in annual reports that are available either from Mackenzie High School or the University of Michigan's English Composition Board; it is relevant here to note that the MHS/UM WP was designated by the National Council of Teachers of English as the state of Michigan's Center of Excellence for the 1990-91 school year.)

Interest in developing "grass-roots" writing programs elsewhere in Detroit to enhance students' academic writing, reading, and critical thinking abilities led to design of a Winter 1990 University of Michigan graduate course (working title: Leadership in Writing Across the Curriculum) taught by Barbra S. Morris and Ele McKenna. Teachers from different disciplines representing seven schools in Detroit were enrolled (course information included in Appendix). This manual is the product of course work by Detroit teachers from the Sciences and Humanities, who taught in the following middle and high schools: Finney High School, Kettering High School, Mackenzie High School, Mumford High School, Murphy Middle School, Ruddiman Middle School, and Western High School.

The teachers representing the seven schools read about, developed, experimented with, and evaluated writing-to-learn activities in their own classrooms. All teachers in the course kept journals and records of teaching innovations: assignments, samples of students' writing, and evaluations of students' work. During the weekly three-hour course sessions, teachers discussed assigned course readings, and shared and planned together their efforts to improve their own students' learning through required writing, often informal and ungraded, always aimed toward sharpening students' critical thinking and their personal engagement with course content and disciplinary concepts. In the process of sharing a variety of "new" writing practices, teachers in the course gradually became a community of innovators, peer coaches, and mentors for each other. They encouraged, advised, critiqued, sustained, evaluated, and motivated each other. Their weekly cooperative dialogues about using writing to learn surfaced many as-yet-unanswered questions: What is the school district's official position on using course time in content areas for writing to learn? How can individual students be led to express themselves freely in writing in spite of their past experiences that writing is used by others solely for grading or evaluation? What is the relationship between writing to learn and standardized testing? How can content area teachers be encouraged to use writing more often in service of students' learning content?

The design of the University of Michigan course addressed fourteen key success factors (as identified by Miles, 1986) for encouraging teaching innovation:

Initiation

- 1) Linked to recognized high priority needs (students' improved critical thinking and writing about course content)
- 2) Clear models for implementation provided (within course readings)
- 3) One or more strong advocates available (faculty as peer mentors)
- 4) Active initiation and assured support for experimentation (administrative supportive contacts established prior to the course)

Implementation

- 5) Coordination (integration of theory and practice)
- 6) Shared control (teachers as leaders)
- 7) Pressure and support (via peer teachers)
- 8) On-going technical assistance (via faculty teaching the course and materials)
- 9) Early rewards for teachers (recognition within the supportive course group and encouragement of central administration)

Institutionalization

- 10) Embedding the innovation in teaching practice (evidenced through journals and evaluations of practice)
- 11) Links to instruction made clear (through written lesson plans and objectives)
- 12) Widespread use (on-site course observations by teaching faculty of all participants)
- 13) Removal of competing priorities (approval by department heads)
- 14) Continuing assistance (through on-site visits scheduled to each school by University of Michigan course faculty)

As co-faculty teachers of the course, Ele McKenna and I sought to create among the teachers enrolled a sense of shared ownership and self-articulated purpose. Furthermore, we hoped to advance and sustain teachers' shared goals—to improve students' learning through writing within their schools in several ways: (1) inviting administrators to visit the class for an evening of teacher presentations about using writing to learn in their classes (see Appendix B); (2) visiting each school for four on-site observations; and (3) developing groundwork for future dissemination in schools through utilizing the leadership of teachers representing each school.

Finally, we promised the Detroit teachers that their own manual would be published and distributed among their colleagues, representing the teachers' work, as well as demonstrating kinds of writing produced by their students.

In line with current educational movements nationally, the course was intended to promote "cooperative learning", an area of significant current

research interest, research providing compelling evidence that well-designed cooperative teacher activity increases involvement in academic, social, and personal domains of school life (Johnson and Johnson 1981, Sharon 1980, Slavin 1983, Robheiser-Bennett 1987). We also sought to model, during the University of Michigan course, a climate of cooperative, open dialogue that teachers might employ in their schools in discussing their own writing-to-learn ideas with their colleagues. As Joyce, Bennett, and Robheiser-Bennett observe in their essay "The Self-Educating Teacher: Empowering Teachers through Research", three factors are relevant to genuine success in teacher empowerment and dissemination of research-based curricular innovation:

- 1) Teachers see how self-knowledge leads to positive change in teaching.
- 2) Teachers acquire new classroom strategies when effectiveness with them is acquired over time and supported.
- 3) The workplace, by building a more positive social climate, can generate collective energy for teaching and learning.

We built upon our concerns and common purposes, employing research findings in order to design new classroom practices together. In The Sense of Learning, Ann Berthoff argues that "the best pedagogy is rooted in the sense of community, in dialogue, in activity." In the end, then, this manual is a symbol of Detroit teachers' collective energies; we hope it is a first step toward development of more research-into-practice collaborations, continuing to link the Detroit Public Schools with the University of Michigan through courses, dialogues, and alliances.

INTRODUCTION

**Ele McKenna, co-faculty member,
University of Michigan Course: Theory, Practice, and Implementation
of Writing Across the Curriculum Programs**

Each Thursday evening (except for vacation days) during the winter semester 1990 (and except for one Thursday night when snow and ice shut down the roads in Detroit) a group of Detroit teachers and administrators who elected to take our three credit hour University of Michigan graduate course met together with Barbra Morris and me to study classroom uses of writing to learn. Our first order of business was to define what we meant by writing to learn and then to determine how we might extend writing to learn across the curriculum in all seven schools represented.

We defined writing to learn as writing with a primary purpose of improving thinking and learning about course concepts. Our initial goal was to examine the theory and practice of writing to learn and our second goal was possible adoption of writing-to-learn approaches in classes within the schools. By the end of the semester, teachers enrolled in the course had introduced writing-to-learn assignments in their own classrooms and were discussing writing-to-learn strategies with other teachers across disciplines in their schools.

During the course we developed:

- a) a list of purposes of writing to learn
- b) responses to questions we anticipated from teachers in schools about assigning writing in content areas
- c) a file of classroom assignments
- d) proposals for various strategies for implementing writing to learn in individual schools

e) a preliminary bibliography about writing to learn for secondary education

a) **Purposes Of Writing to Learn**

After much discussion, we agreed upon a list of primary purposes for using writing as a means of learning:

To help motivate and make students active rather than passive learners

To focus students' attention on subject matter readings

To help students think critically on paper in various ways: associating, analyzing, synthesizing, etc.

To help students identify what they do and don't know about a subject

To improve student participation in discussion about readings

To help teachers evaluate students' learning successes and problems

Our course reading assignments helped focus discussion of educational purposes. The following two sets of lesson plans developed for math and science classes are drawn from *Plain Talk about Learning and Writing Across the Curriculum*:¹ (Many writing-to-learn assignments, I should stress here, can be adapted for use in any subject area.)

MATH

PURPOSE: THROUGH INFORMAL WRITING STUDENTS LEARN WHAT THEY DO AND DON'T KNOW ABOUT A SUBJECT

Rule sheets

Perhaps the major way I use writing in my classroom is through the assignment of what I call

"Rule sheets." When writing rule sheets, students use their own words to explain the methods they use to solve

¹We assigned *Plain Talk about Learning and Writing Across the Curriculum* as one course reference book. It focuses on classroom practices in secondary education and implementation of writing-to-learn approaches to teaching. See bibliography section of this manual for full reference. The math assignments given here are from *Plain Talk*, pp.51-54, from Pam Walpole, J.E.B. Stuart High School, Fairfax County, Virginia and pp.27-35, from Judy Grumbacher, Falls Church High School, Falls Church, Virginia.

various types of problems. Reading rule sheets gives me access to students' minds: if they have misunderstood something, I will see it in writing and will be able to help correct the thinking. Rule sheets also lead students to organize what they have learned, to make conscious efforts to look for patterns and to examine theory, rather than just do problems by rote. Best of all, students generally find it much easier to study from their own writing than from notoriously abstruse textbooks.

Card Files

Students sometimes feel overwhelmed by the number of theorems, definitions, and formulas that accumulate during the year (especially in geometry class). To help them manage all these facts, I have every student maintain an index card file. During each unit, I assign cards to be written, one card for each new term or formula (although students frequently add cards of their own). On the front of a card, students write either a term ("supplementary") or a description of a formula ("the number of degrees in an n-sided polygon"). On the back they put the definition (in their own words, with a picture or example if it helps) or the actual formula itself. By the end of the year, each student has a valuable flashcard file most helpful not only at final exam time but also when reviewing for college boards.

SCIENCE

PURPOSE: WRITING TO IMPROVE READING

Writing can also help students read scientific texts with more understanding. When students respond to their reading in writing, they create a text which shows how well they understand what they have read. This kind of writing is different from taking notes while reading. It is not outlining; rather, it is a record of students' reactions to their reading in which they talk individually to the authors--as writers to other writers.

The "rules" for response logs are straightforward: write what you learned, tell what you thought about the reading, and, finally, list any questions you have as a result of the reading or your writing. Three major benefits occur: First, since it is hard to write a response without first doing the reading, more students read the assignment. Second, having written and thought about the reading assignment, students participate more freely in class discussions. Third, in the process of writing out questions they have about the reading, students sometimes discover their own answers.

PURPOSE: WRITING TO SOLVE PROBLEMS

Writing is a powerful tool to learn to solve mathematically-based problems. Because some problems in science classes are difficult and involve a series of steps, many students have trouble even knowing where to begin. Writing about the relationships involved in the problem, before becoming bogged down with numbers and formulas, helps students solve problems through a

real conceptual understanding rather than through memorized equations that can be forgotten after the test. I often ask students to explain an equation without the use of a formula or to explain why a given formula is the appropriate one in a given situation.

The next two sets of assignments, from *Roots in the Sawdust*,² illustrate purposes of writing to learn in social science and English.

SOCIAL SCIENCE

PURPOSE: WRITING TO IMPROVE ANALYSIS

Clustering is a strategy described by Gabriele Rico in her book *Writing the Natural Way: Using Right Brain Techniques to Release Your Expressive Powers*. Clustering helps arrange ideas that have been generated by writing. I have used clustering at the end of the African unit to focus on the major problems facing Africa. This serves as an excellent review. Students were asked to list in their notebooks two or three major problems facing Africa. From these lists we as a class clustered the major problems on the board. . . [Such a] chart by no means covers all the problems faced by Africa, but it does give the students a broad outline of the continent. It is easy to see how this clustering exercise could be utilized in many other areas.

PURPOSE: WRITING TO PROMOTE DISCUSSION OF COURSE CONCEPTS

I introduced a sociology lesson by asking: Is social change progress? Should we advocate a return to earlier, simpler times? Students were told they were going to be transported back in time, but they could not know the place or the period of time. They were to list five things they would like to take with them and to explain why each item made their list. . . . Most of the items selected were modern. Perhaps one student said it best when he stated, "I never really gave it much thought before, but there really are a lot of things that would be hard to give up, especially those medical advancements we take for granted." When we discussed this issue, the class really began to question progress. It was an active discussion displaying real thinking by the students about the subject.

²We used *Roots in the Sawdust* extensively to supplement examples of classroom practices given in Plain Talk. See bibliography section of this manual for complete reference. The social science assignments given here are from *Roots in the Sawdust*, pp.67-71, from Bruce Beaman, Mountlake Terrace High School, Edmonds, Washington. The English assignments are from pp. 222 and 224, from Anne Gere, editor.

ENGLISH

PURPOSE: WRITING TO SYNTHESIZE LEARNING

Biopoems--Biopoems enable students to synthesize learning because they must select precise language to fit into a particular form.

A biopoem follows this pattern:

- Line 1. First name
- Line 2. Four traits that describe character
- Line 3. Relative ("brother," "sister," "daughter," etc.) of _____
- Line 4. Lover of _____ (list three things or people)
- Line 5. Who feels _____ (three items)
- Line 6. Who needs _____ (three items)
- Line 7. Who fears _____ (three items)
- Line 8. Who gives _____ (three items)
- Line 9. Who would like to see _____ (three items)
- Line 10. Resident of _____
- Line 11. Last name

EXIT SLIPS

Exit slips are usually distributed at the end of class and provide closure for learning by asking students to summarize what has occurred during the preceding class. These slips provide closure for students and, if collected by teachers, indicate what students know and need to know.

Our discussions of the benefits of writing to learn were supported by the work of Anne Gere (editor of *Roots in the Sawdust*); she suggests that writing-to-learn activities can build community in a classroom and argues that "community building is an essential part of writing to learn in any classroom because students need to establish trust before they will be willing to take the risks involved in writing to learn." She provides a number of examples of practical assignments with a purpose of community building.³ Two possibilities are:

Interviews. Have each student interview another and then introduce the person interviewed to the class. After every three or four

³From the glossary of *Roots in the Sawdust*, p. 223

interviews ask the class to name those students who have just been presented. When all have been interviewed, ask each student to write the names of all students in the class.

Metaphorical questions. Take roll by asking each student to respond to a question such as: If you were a dessert (or junk food, or breakfast cereal, or animal, or road sign), what would you be?

Finally, in discussing writing to learn after using some of Gere's techniques, Norman Grange--English Department, Kettering High--contrasts what this sort of approach to classroom pedagogy does and doesn't ask of teachers:

Adoption of writing to learn as a methodology does not ask anyone to become a teacher of writing. Nor does it ask anyone to check compositions or evaluate students' progress in *writing*. It does ask teachers to use writing to help students to learn and think about subject matter in all disciplines. It also asks teachers to use the students' writing to check their understanding of and progress in course concepts. If better writing comes about as a by-product, fine. The prime responsibility for direct instruction in writing itself will remain with the communication arts department. Product-based writing will still be taught there as it has been. Writing whose purpose is a finished, publishable product in best form will always have its place and so will the informal writing-to-learn activities.

b) Questions about Assigning Writing

Throughout the course, we discussed together some appropriate ways for teachers to respond to writing-to-learn assignments: for example, the logistics of responding to journals and logs and how to respond adequately to "ALL that writing." At the end of each class, also, we asked teachers to write about something we had all discussed in class.

Ellen Harcourt--Mackenzie High, English Department--remembered her early unhappy experience with requiring journals in her English classes and explained why she was not enthusiastic about using them:

Tonight someone mentioned journals. Someone always does when English teachers talk about teaching writing. I shuddered

and uttered some negative response about ALL that writing to read, even if you didn't have to correct it. I was remembering when I was a young(er) teacher, with more energy and less judgment, staggering home every evening with stacks of journals to read. Sure, some of the writing was great, but most of it tended toward boring recitals of what adolescents had for lunch or what they planned to eat when they got home or what was on TV or who they did or didn't love (currently). Dreary stuff! The worst of it was intimately confessional. I felt like Ann Landers! No, I really didn't want to do journals again.

Yet, after class, Ellen began to seek a solution to problems she had recalled with using journals in the past. Talking about journals in our weekly class led her to read a published article about using them. Then, in her own classroom journal, Ellen described finding a fresh and better approach to students' journals:

Isn't it funny how things come to you later when they have been mentioned in a previous conversation? That's what I thought when I picked up on old copy of *The English Journal* and began thumbing through it. I found an article that changed my mind. At my age, that's revolutionary. It was "Liberating the Urge to Write: From Classroom Journals to Lifelong Writing" by Anne McCrary Sullivan (November, 1989). I took the existential leap and started using journals again this year with my seniors. I wish I had begun sooner. The benefits have already been enormous. Let me outline Sullivan's suggestions.

First she gives students what she calls "The Big Build-Up." This was fun for me. I gave my students a week to choose a permanently bound blank book to use as a journal. This could be ordinary, cheap, serviceable notebooks or more elaborate book bound journals with blank pages. The paper could be lined or unlined. The size was of no consequence but the journal should be one which would be convenient to carry to various places. I showed them an old journal of mine which was quite impressive. It is book sized, made of tooled leather and was a beautiful gift from a colleague and friend. I read them a few pages to suggest the content of journal entries. I suggested that their journals this year might contain snapshots, paper clippings, momentos of this final semester of their senior year. The students were very receptive to this idea.

Then I gave them Sullivan's journal rules: "Every time you write, record the date and the place. Every day, the instant the bell stops ringing, journal time begins." What a great way to start class! My students tend to be tardy and talk a lot at the beginning of the hour while I try to take attendance. Journals stopped that! Students are not allowed to talk during the five or ten minutes set aside for this activity. Sullivan suggests that students be required to "give attention" to their journals during this time. They may not feel like writing every day, so they have the choice to read their previous entries, draw in their journals, etc. As long as they focus their attention on the journals, they are on task. If they are unable to think of journal topics, I will write a suggestion on the board daily.

In writing about her experience with journals, Ellen also focused on what she referred to as "the biggest stumbling block for both teacher and students"—the question of grading writing-to-learn assignments:

Invariably, at this point, if not previously, the question of grades comes up. This is, in my opinion, the biggest stumbling block for both teacher and students. But Sullivan has the answer and I use a variation of it. The grade is based on two things: (1) daily observation of writing during journal time and (2) journal evaluation forms completed after a few weeks of writing and periodically thereafter. The daily observation is great from my point of view because it rewards students who come to class and try, and it discourages what I ironically call the "correspondence student" who drops by occasionally to pick up assignments or drop off late ones. There's just no substitute here for on-site writing in class. This means being in class and on time! If students complete the week as outlined, they can earn an A. I drop one grade for every day missed, excused or not. The journal evaluation form asks questions about where and when students write, how often they write, and what types of writing they are doing. It asks them to copy sample phrases, sentences, and entries they select for me to see. Here's the kicker! I never directly carry home and read their journals! How liberating for both of us! However, at the end of the semester, each student does prepare a portfolio of her/his writing. Sullivan requires twenty typewritten pages of what students consider to be their best work. Because I started the journals so late in the semester, I require slightly fewer pages. This is impressive to my students, but not threatening. I like the idea for several reasons. It encourages students to look again at their writing critically and motivates them to edit and revise. And, as much as my

students complain about having to type, they take pride in turning in a nice thick, neat, official copy of their best work. . . . Next week we will begin reading aloud "The Physicist" by Friedrich Durrenmatt. It raises questions that students can address in their journals and now that they have a small store of their thoughts, instead of taking a test, I ask them to write about something from their journals: a poem, a short story, a personal essay, a dialogue or whatever may catch their fancy. Then we will share, peer edit, revise and make final copies. At least they will have their own voices in their writing.

The journal evaluations will be in next week as well. I plan to report to the class as a whole as Sullivan suggests. I will pull out numbers; the highest number of journal entries, the highest number of locations, a report on the "art of detail" as an exercise (see Sullivan's sample); I look at some favorite words and sentences. Having discussed this report, I can ask students to set goals for their journal writing for the next three weeks. They will write these goals in their journals and give me a copy. In the next evaluation form I will include new questions: What was your goal for journal writing during this period? How have you tried to meet that goal? Evaluate your success. Copy material from your journal to demonstrate your achievement if you can.

Many teachers grade writing-to-learn assignments on content alone and let students know their grading policy:

Journal writing will not be graded for mechanics. The "grade" on your journal will be either a (+), (), (-).⁴

Grading of writing-to-learn assignments other than journal writing can be minimal too. For example, grading of Card Files in math, described earlier, can be selective:

To minimize my time in grading, I require that the cards be kept in alphabetical order, with formula cards in the back. I collect the card files each test day. While students are testing, I randomly choose one current term (to be sure the file is being kept up to date) and one old term (to be sure the cards aren't being discarded): these are the only two cards I will grade. Thus, grading is quick and easy; the card file is easy for the students to maintain;

⁴ From *Plain Talk*, p.38, Barbara Page, J.J. Kelly High School, Wise, Virginia.

and the flashcards provide an easy way for the students to review. In this case, "easy" is good for us all.⁵

For some teachers an issue in grading remains correctness of form. For them, it is difficult to overlook mechanics and grammar and to focus only on content. They worry that student writing, when it is uncorrected, reinforces errors in grammar, spelling, etc.

During group discussion on the question of responding to "all that writing," Norman Grange (Kettering High) contributed ideas about complexities of evaluation and correctness:

Writing to learn, process-based writing whose purpose is to serve as a support to teaching, learning and evaluation, is a powerful tool that can be used in any discipline and frees the teacher from evaluating the correctness of the written product. Process-based writing (writing to learn) is targeted toward the mastering of concepts, the checking and refinement of understanding. It is not necessarily intended for publication, and therefore may never be in its best form--only in a form good enough to do its job. Writing to learn may thus serve as an underpinning for product-based writing. A series of writing-to-learn assignments, for example, on the chapters of a novel, might serve as material toward a longer and more general product-based paper on the novel as a whole. Product-based writing is perhaps the easier to evaluate, because the evaluator simply judges what is there on the page. Process-based writing is more difficult to evaluate. Since what is on the page is not the main thing, the teacher must judge whether or not the content of the writing reflects the kinds of learning and thinking that was intended.

One teacher at Murphy Middle School (during our site visit to her school) talked about taking a "rehearsal" attitude toward correctness in writing. As a specialist in music, she made a natural (for her) connection between correctness in writing and correctness in singing. She said if we had a singing-to-learn program, in order to reinforce learning by singing facts about

⁵ From *Plain Talk*, p.54, Pam Walpole.

American history or science or math, no teacher would be concerned about technical correctness of the singing students produced if they learned content. Instead, teachers would focus on the content of the verses and would expect a music specialist to deal with problems of technical correctness later in a music class. Therefore, she concluded, teachers in subject areas other than English could safely leave to the English language specialists the teaching of technical correctness in writing. It is enough to have students write as often as possible about concepts they must learn in courses.

c) **Classroom Assignments**

Having agreed upon basic purposes for using writing to learn, and having examined questions about introducing writing to learn in subject area classes, next, we compiled a list of general writing-to-learn assignments that teachers could experiment with in their individual classrooms:

journals, logs, problem solving sets, summaries of concepts, reactions to readings or teacher presentation, brainstorming, listing, and clustering exercises, letters, notes, poems, stories, interviews, role-plays

In the next section of this manual, four groups of teachers—one group each from Science, English, Math and Social Science—and one group of administrators present writing-to-learn assignments. Some of these assignments have been tested by the teachers and a few haven't as yet been tested in classrooms. Teachers note when they have been able to include writing-to-learn assignments in their lesson plans; they report on the success or failure of assignments they have tried. A sampling of student papers is included; students' names are included where permission has been given to do so. Some teachers wanted to introduce more writing-to-learn assignments to their students, but our Winter term course brought us up to the end of the

school year. In many cases, lesson plans had already been established and couldn't very easily be changed. Nevertheless, everyone tried some assignments in writing to learn and expected to continue to expand uses of writing to learn with course content in the next school year.

d) Strategies for Implementing Writing to Learn In Individual Schools
Groups of teachers from seven schools represented in the course developed strategies for disseminating writing-to-learn ideas in their schools (see Section VII).

e) A Select Bibliography of Writing to Learn in Secondary Education

The bibliography at the end of the manual focuses, for the most part, on publications that we referenced for the course or the manual regarding using writing as a tool for learning. Some references more generally refer to principles of writing, some extend beyond secondary education. Also included in our list are a few observational studies that lend credence to classroom practices described throughout this manual.

A FILE OF WRITING-TO -LEARN ASSIGNMENTS FOR DETROIT SECONDARY SCHOOLS

Teachers and administrators from the seven participating schools contributed individually or through small group work to development of this section of the manual:

Karin Brown, Ruddiman Middle School
Tracy Carpenter, Mackenzie High
Geraldine Conoway, Mumford High
Helen Didley, Mackenzie High
Jean Ellis, Ruddiman Middle School
Mary M. Evans, Kettering High
Norman Grange, Kettering High
Arbrie Griffin, Finney High
Ellen Harcourt, Mackenzie High
Kwasi Machupa, Finney High
Beverley Moseley, Western High
Kristine Murray, Mumford High
Anne Platt, Mumford High
Sadie Robinson, Mackenzie High
Sharon Rouse, Mackenzie High
Austin Sanders, Ruddiman Middle School
Rick Seefelt, Murphy Middle School
Joyce Simpson, Kettering High
Lillian Williamson, Mumford High

Section I

Writing in Science Classes

Sharon Rouse, Mackenzie High School
Joyce Simpson, Kettering High School

Sharon Rouse from Mackenzie High and Joyce Simpson from Kettering High discuss their introduction to writing to learn in science; they list and comment on a number of general writing strategies they have either tried in their classrooms or that they believe "readily lend themselves to the science content area." They include specific writing assignments for learning science. At the end of their section, they include sample papers from students responding to some of their assignments.

Introduction to Writing to Learn

Writing across the curriculum sounded like another grand theory without practical applications in the science area until we actually tried the various writing activities. We both teach at large urban schools where science is generally not liked by most students and is mastered by even fewer students. Our students have a difficult time understanding science concepts, and an even more difficult time demonstrating knowledge of the science process.

We learned that while writing to learn is not the answer to all current problems in education, it addresses many of the daily needs of classroom teachers. Writing to learn allows a teacher to add to students' knowledge of concepts as well as assess students' comprehension, not test the memorization of facts. We believe writing activities also allow students to become independent thinkers. When students are given a chance to think and write about their individual ideas, they have freedom to think for themselves-- something they may not be used to doing in classrooms where even lively discussions may leave some students out.

Also, involving students in the educational process through increased writing tends to make students active instead of passive learners. Students are much more involved because they must produce more than memorized information. Another major benefit from writing to learn across the curriculum is an increase in self-confidence by the students. Students have written evidence of their own learning that shows they are mastering subject matter.

Writing to learn is meant to increase students' understanding of science content not their ability to write correctly. An improvement in writing skills perhaps will follow from some of the activities given, but, most importantly, students know more about (and possibly become more interested in) concepts presented in science classes.

A General List of Writing to Learn Science Strategies

Listed below are strategies we have tried successfully or believe readily would lend themselves to the science content area. Many of these ideas can be adapted into any content area. These are not by any means all the possible ideas that can be tried. This small sample, however, can give other educators ideas of their own. Our strategies are broken into various categories that are somewhat arbitrary and may overlap.

Writing Laboratory Reports

Summary Paragraphs—These paragraphs appear at the end of a laboratory report in which a student tells what she/he learned in the lab. (These paragraphs are different from concluding sections.) Many times, the lab report plus writing about learning teaches more about the activity of science than a single principle being tested out.

Laboratory Report—All science teachers know the benefit of using reports to demonstrate a science process. Remember to give students a clear format for writing the sections of any report and good sample models to follow.

Writing Observations of Physical/Chemical Change—Sometimes students' observations are short, incomplete ideas. Compiling a summary description of events makes a student more aware of everything happening during the progress of an experiment.

Free Unstructured Writing

Use of prompts—A prompt such as "The year is 2050 and a major discovery was just made in . . ." allows the student to think about possible development of new ideas in science and be creative. Or, a prompt may introduce students to environmental studies by asking for an imaginary scene 30 years from now (see end of section for examples).

"I wonder why" questions—This type of question written on the blackboard allows students to think about the origin of an area of science and may encourage students to look for information about a particular area of interest that they have speculated about in class discussion.

Does the reading make sense?—Students explain in writing what they understood about a reading assignment and ask questions about the areas they did not understand. This technique helps a teacher assess students' comprehension of a particular reading assignment and can help a teacher see where confusion might exist or where interest in a subject can be built upon.

Admit or exit slip—These are brief definitions, explanations of new concepts being studied, etc. For example, students are asked to turn in a sheet of paper with the answer to a brief question about a new concept when entering or exiting the classroom, either at the beginning or end of the hour. We used this activity effectively when teaching new procedures for experiments. It works to ensure that students know what to do (step by step) during an experiment.

Summaries from readings—Students write a short listing of concepts central to a reading assignment. In addition to writing lists, students form groups and discuss topics and exchange summaries. This takes some careful grouping to get everyone talking about science, but once students begin, they

raise interesting points and questions that can be brought back to the entire class.

Writing to assess prior knowledge—This can be done before a unit is introduced to identify students' misconceptions. Ask what students know about a topic or what they want to know about it.

Problem solving with writing—In this activity, the process for solving a particular problem is written out. An example: Tell how you would find the concentration of a solution.

Evaluation of learning after a unit—This assignment resembles assigning an essay test, but it is easier to grade and less threatening to students.

The assignment: Write a letter to a friend telling what you have learned about the particular unit we have just completed.

The teacher reads student responses aloud and anonymously in order to dialogue about course content explanations.

Clarify and Organize Content

Concept mapping—Studies of the educational value of concept maps in science indicate the importance of student's considering relationships between ideas. Understanding connections between concepts is especially critical in science where development of new research depends upon inter-related interests and ideas of scientists.

Dialectics—This writing technique helps students think about concepts as they read. With this technique, a student divides his/her paper into a right and a left half. The left half of the paper is used for notes on readings while the right side is used to write questions or comments that relate to the notes on the other side.

Describe/explain process in diagram--A drawing of a particular process or item is given to the student. The student is asked to label the parts or describe what is happening in the picture. The student considers what the picture represents. For example, a student sees a drawing of a cell with protein synthesis occurring and is asked first to label parts and then explain the entire process in her/his own words.

Enhanced Structured Writing

Research paper--These assignments can be a headache for both the teacher and student; nevertheless, they do help a student learn a particular area of science in depth. Writing about research must be guided and modeled for students who are new to the process. It is helpful to give students examples as well as deadlines: developing a topic and preparing note cards are presented as preliminary to producing bibliography, rough draft, and final paper.

Science projects--Individual studies increase students' knowledge of the science process and develop students' particular areas of interest. As with the research paper, it is necessary to give students deadlines and time lines of work due and examples of how to produce a quality project.

Laboratory Reports--These writing tasks, mentioned EARLIER, are often the only "structured" writing in science that students must do. It is important to provide and explain standard formats with which students can become familiar. It may be necessary to pass out several examples to students who have never before completed a standard laboratory report. Students need to understand why the sections of a laboratory report appear in the particular order that they do.

Summary

Thus far, general assignments have been suggested for your classes to increase the number of meaningful writing activities, to help improve

students' learning of content. Examples of assignments that meet specific learning requirements are suggested below:

A List of Specific Writing Assignments for Learning Science

Problem Solving

1. Write a word description of $\text{Force} = \text{Mass} \times \text{Acceleration}$.
2. Write a word description of a process being shown in a diagram, i.e. photosynthesis transcription of RNA.
3. **Concept mapping.** Have students develop a concept map concerning fish and their adaptations to their environments.
4. Given prompts, students write news articles dated year 2010 describing new scientific breakthroughs they have invented.
5. Free-style writing. Support your argument for or against the "frozen embryo" phenomena. (Students receive brief articles on either side of the debate and the class as a whole discusses the controversy before time is set aside for free-writing.)

Writing Observations Example

6. After mixing Benedicts solution and polysaccharide solution, place 40 ml of mixture in a hot water bath. Write (specifically) all activity you observe occurring in the test tube.

Summary Paragraphs

7. In the last ten minutes of a class period, write a conclusion in paragraph form to a discussion held in class that day.
8. Draw a flow chart showing how coal, oil, and uranium are used to produce electrical energy that comes into your home, and how these

sources of energy react and empower your TV. Show each step. After the chart is complete, write out what is happening. (Explain the diagram.)

Evaluation

- 9. (After covering a topic for 2 weeks) Write down everything you know about force and motion. Begin with a definition of each.**
- 10. Discuss the Law of the Conservation of Energy in your own words. Does it make sense to you? Why or why not? Do you have questions about it? What are they?**

Organize Content

- 11. Using a microscope, look at a slide of each stage of mitosis. Explain what is happening in each stage you observe. Describe the motion of the chromosomes and centrioles. (One paragraph per stage.)**
- 12. Pretend you are a research scientist with access to any chemicals or scientific equipment necessary. A fellow researcher brings in a "thing" found in a pond. You are given the task of determining whether this "thing" is living or non-living. Based on our study of the living condition, describe what tests you would do to determine whether it's living or not. (Be specific and detailed.)**

Examples of Student Papers

Examples of Response to "Prompt" Assignments

The World in 30 Years

A woman carries her child to the hospital because her child is sick from contaminated water. There is no car for the lady because the earth has run out of the resource it takes to make gasoline. She finally reaches the hospital after an eight-mile walk. She rushes to the emergency room, but there are already 50 people ahead of her whose children have the same problem also. She goes and sits down while the radio in the lounge goes on to say, "Today two more countries had to surrender and become dumping grounds for other countries' garbage."

The mother sits down and wonders and remembers when she was 16 years old and there was a special on Earth Day and all the things she worries about now were on that program, but she didn't care then. Now she looks down at her sick child and walks over to the window and sees garbage trucks dumping garbage in the parking lot of the hospital in the rear. As she wipes the sweat from her forehead, she hears another broadcast on the radio, "Today scientists found three more holes in the ozone, and there is no sign of relief from the heat. It is 120 degrees and the death rate among senior citizens is skyrocketing to almost 200."

Before she can sit down again, the doctor comes in and tells her, "I'm sorry we have no room for your daughter, but there is a hospital that is just ten miles away from here." As she leaves she cries because she sees her poisoned child dying, dying from the pollutants put into the oceans, the seas, and the lakes from her own generation. She remembers the beautiful sun that is now darkened every day by clouds, the beautiful grass that is now filled with trash because there is no where else to put it. Now the mother watches her child get weaker and weaker until she dies. The journey is over. She now cries and wonders, did I see this happening? Did I see this coming and do nothing about it? Am I the reason my child is dead? She is now left surrounded by garbage and left alone, in a world that looks as if it is ready to be put out of its misery.

All that is left now are the memories of her daughter, and of the world she once knew that is now a great big garbage can.

Alesia Watters

So What A Life

I remember when there were a zillion of me. When I was a sapling, everything around me was beautiful. I guess that was in 1952. My friend, Ki Ki, a robin, has kept me informed on world affairs. She comes every first of the month, because that's when the rain cools things down. Everyone used to compliment me on how perfect my leaves were and how perfect my trunk was.

We always knew of the rumors that on the other side of the hill we were being cut down more and more every day. Soon, the two-legged creatures came to our side. I will never forget all the death, and hearing them die. It was like the wars Ki Ki told me about so long ago. She also told me about something called toxic waste that the others were subjected to in the cities. We were also being destroyed. I stood there watching my parents, neighbors, and children die. Now, I'm 70 years old. and alone. The rain is gone and so is the green. My leaves don't grow any more and my trunk has chipped practically away. I'm just waiting to die. The two-legged creatures are buried all around me.

Billy's Dream

Billy and his friends were sitting on his porch bored with nothing to do. Billy was very observant. He looked around and realized how unclean the environment was. There was paper everywhere and there was a factory right around the corner which sometimes had an eerie effect on how bright the sky was. Billy said to his friends, "Look guys, since we have nothing to do, let's clean this street up, let's start doing things to help our environment. If we keep working at it, just think how much better the world will be in 30 years."

Billy's friends looked at each other and laughed, then went home. That night, Billy had a dream of what the world would be like in 30 years. In his

dream people began to realize how badly they were damaging the environment and started to try to improve it. There was a ticket for littering and you could only have a certain amount of mileage on a car. Chopping down trees was against the law. In all, Billy's dream portrayed how beautiful the world would be if people just took time to care.

The next day Billy jumped out of bed and rapidly got dressed. He went outside and started picking up trash around his house and said to himself, "We have to start somewhere."

Monique McCall

Example of Student Response to "Describe/Explain Process in Diagram" Assignment

Diagrams of the cell during various stages of activity are provided to students and they fill in blanks on the diagram; students' writing:

- 1. In this section, DNA is replicating itself on transcription.**
- 2. m RNA is going through cytoplasm to synthesis protein.**
- 3. m RNA is connecting with (?) RNA which is transition. It is bonding together to make a certain amino acid.**
- 4. Transcription taking place.**

Example of Student Response to "lab report" assignment

Biology Experiment

Title: Heredity and Environment

Purpose: The purpose of this experiment is to determine whether chlorophyll is dominant or recessive and whether the environment affects the results.

Hypothesis: I think chlorophyll is dominant and the environment does affect the results.

| | | | | |
|---------------------|---------------------|--------------|--------------|--------------------------|
| <u>Data:</u> | <u>Green</u> | <u>White</u> | <u>Green</u> | <u>White (uncovered)</u> |
| | *0 | *18 | 9 | 1 |
| | 6 | 8 | 27 | 8 |
| | (covered with foil) | | 17 | 8 |
| | | | 18 | 4 |
| | | | 15 | 3 |

| | | |
|---|----|----|
| | G | g |
| G | GG | Gg |
| g | Gg | gg |

| | | | |
|---------------------------|--------|----------------|----------------------------|
| Ratio | 151:37 | <u># Green</u> | <u># White (Uncovered)</u> |
| | 4:1 | 33 | 3 |
| Dominant/Recessive | | 20 | 3 |
| | | 12 | 7 |

Total **Green ~ 151**
(Uncovered) **White ~ 37**

Conclusion: I conclude that I accept my hypothesis because chlorophyll is dominant and the environment does affect the results.

Examples of Student Writing -to-Learn Responses to "Observations" Assignment

- 1. How I account for differences among the seedlings which were kept in the light is the white plants carried a recessive gene for the albino condition and couldn't produce chlorophyll; the green plants produced chlorophyll.**
- 2. I attribute these differences to heredity because I believe some of the tobacco plants carried a recessive gene for the albino condition and some carried a dominant gene for normal chlorophyll production.**
- 3. Yes. The number of green and albino plants is close to what I expected. Yes, the class of plants is average.**
- 4. The percentage of albino seeds grown in the dark was greater than the percentage of albino seeds grown in the light. In the plants grown in the dark, the white plants were dominant over the green plants; whereas, in the plants grown in the light, the green plants were dominant over the white ones.**
- 5. The differences should be attributed to environment because if they had all been grown in the same type of environment, the percentages would have been more alike/closer together.**
- 6. From the results of this experiment, the conclusion I might come to about the factor that affects formation of chlorophyll is that sunlight is needed to produce green plants with chlorophyll.**
- 7. The results of this experiment indicate the effect of environment on the development of an inherited trait is if the plant has inherited albino traits, it will be white regardless of the environment; however, if the plant has inherited chlorophyll genes, it probably won't turn green unless it has sunlight so it can produce chlorophyll.**

8. The way I can account for the fact that albino plants sometimes appear in a formerly homologous population of green plants is a green plant probably crossed a white plant and produced a plant that was dominant in genes of the albino condition.

Example of Student Response to "Conclusion Paragraph" Assignment

What I Learned in the Heredity and Environment Experiment

What I learned in the Heredity and Environment experiment was how the difference of environments can affect plant growth. I learned that plants need water (rain) and sunlight to grow properly. I also learned that plants absolutely need sunlight to produce chlorophyll in green plants. The most interesting thing I learned was the difference in the appearance of plants. I found out one group of plants, grown in the dark, was taller than the plants grown in the light. The reason for this is the plants in the dark were trying to find sunlight, whereas the plants grown in the light had sunlight. Therefore, the plants in the dark had to stretch more to try to find/get closer to the sunlight, which they never found. As a result, the plants could not produce chlorophyll and turned out white (albino).

Section II

Writing in English Classes

Norman Grange, Kettering High
Arbrie Griffin, Finney High
Ellen Harcourt, Mackenzie High
Beverley Moseley, Western High
Anne Platt, Mumford High

First, **Arbrie Griffin, Finney High School**, discusses her perception of using writing in her English class to improve the quality of student learning and she provides samples of student papers from a number of activities she tried during the last few months of the 1989-90 school year. **Beverley Moseley, Western High**, then comments on writing to learn and describes two assignments she used in her class this school year; some assignments include samples of students' responses. More of Beverley's assignments with examples of student papers are included in the social science section of this manual. **Ellen Harcourt's** contribution from **Mackenzie High** follows. She provides descriptions of assignments and numerous samples of student papers. **Anne Platt, Mumford High**, then describes several writing-to-learn activities. Finally, **Norman Grange** from **Kettering High** comments on one particular effect of using writing to learn in a high school class: *to change the students from passive to active learners..* He then describes a writing-to-learn activity and provides sample papers from his students engaged in one part of an activity. He completes this section on assignments in the English class with a long and useful list of writing-to-learn assignments. Additionally, because he teaches languages other than English, he also comments (by the way of an aside to this section of writing-to-learn assignments in the English class) on the use of writing to learn in Spanish class.

Using Writing to Learn
Arbrie Griffin, Finney High

Although I teach writing in my English classes and also consider myself a competent writer, my formal training in teaching and learning writing has been limited to a single workshop on the Bay Area Writing Project. For this reason, I am always looking for ways to increase my instructional techniques. Therefore, when I was given an opportunity to take a Writing to Learn Across the Curriculum course, I eagerly signed up.

The University graduate course started after my class syllabus had been formulated for the second semester. Consequently, any new strategies I attempted had to be superimposed on an existing curriculum. The first technique I tried was to have students read a passage from the text and write a summary/reaction to the piece. I tried this method with a segment from the autobiography of Frederick Douglass (See samples of student responses to this assignment). My second assignment focused on writing to learn; I asked students to view an episode of "Eyes on the Prize" and write their reactions to it (samples follow). These assignments combined practices I had used before being exposed to the Write to Learn theory.

Next, I tried to combine writing as a learning tool with "prior" knowledge assessment, one of the catch phrases of our school system. For example, before reading "A Mystery of Heroism" by Stephen Crane, students were assigned to write about an incident in which they had been dared to do something dangerous (See Response 3). We then read these compositions aloud – as a lead into the reading assignments.

I also tried admit/exit slips. The first time I assigned admit slips was not very successful. So I had the students do the reading in class and write an exit slip telling what they had learned from the material they read (See Response 4).

Another Writing-to-Learn strategy that I used was the Learning Log. After explaining concepts like irony and theme, students were told to write a definition of the term in their own words and to tell how the selection(s) being studied exemplified the term (See Response 5). I also used a form of a learning

log at the conclusion of a unit or a sub-unit when I had students write about what they have learned on a particular aspect of the unit (See Response 6).

The Write-to-Learn activity which students enjoyed most was the biopoem. I illustrated the format for them. Next I had them write a biopoem about themselves. After becoming familiar with the format, they began writing biopoems on characters from their reading.

Writing always has been important in my classes. Taking this course on Writing to Learn/Writing Across the Curriculum has helped me to focus on what can be achieved by having students write about what they are studying. This course validated precepts that I picked up in the Bay Area Writing Project (Renaissance Writing Project in Detroit). I have asked my students to do more writing assignments that are not checked strictly for grammar and spelling. I truly believe that students who are under less stress about grammar will become fluent writers who eventually develop proficiency in mechanical areas of writing. However, I do from time to time request students to write more structured papers which, nevertheless, draw on techniques espoused in Writing to Learn and in the Bay Area Writing Project.

Student Papers in Response to "Summary/Reaction" Assignments:

Mad and sad, are some of my reactions to Frederick Douglass' narrative. Mainly because of the way the slaves were treated like they were animals. The plantation managers seemed to have no heart when it came to caring for the slaves. Little babies were taken from their mothers before they were one year old. Men's and women's clothes were not very comfortable and were made out of coarse cloth. When the clothes failed them, they had to go naked until the next allowance day. Which was a long month!

Antonio Green

When the children were taken away from their mother at 12 months, I think that was very cruel to do. Because anyone who had had a child and that child was taken away, the person would have felt just as empty as the other woman felt when her child was taken. That's a part of you and when it's taken, you don't quite feel right. The children were only given two shirts and, when that failed, they were not given any more clothes for about a whole year. They would have to walk around naked through just about all of the seasons. If that was in the winter, the owners didn't care as long as their work was done on their plantation, that's all.

Regina L. Hadley

Reaction to a segment of the Martin Luther King Series:

"Eyes on the Prize":

Who are We?

This documentary was basically about the struggle Dr. King and other Civil Rights Leaders went through in the 60's to make it possible for what we have today. Their continuous contributions in the southern states, and in Chicago, and all over have opened doors for the Black people. It gave us opportunities a white person had. Intimidation, threats, bloodshed, and even death was present, but opportunity was still there. Can you image what would have happened if they would have just given up? Scary! But luckily our people stuck together and proved to themselves and the rest of the world that we are truly the strongest and the proudest race of people on Earth.

I had two reactions to this program, one was that I felt so proud of what they did for us. It made me feel good to know that people in the past cared for my welfare. Today the other reaction I felt is anger; because I turn off the T.V. and gunshots and police sirens were all I could hear. Listen, everyone, I only have one questions to leave you with, who are we, to throw away and destroy all of Dr. King's dreams and hopes. WHO ARE WE?

Brian Thomas

Before reading "A Mystery of Heroism," students wrote papers in response to "Assess Prior Knowledge" assignment:

The Most Dangerous Thing I Have Ever Done

The most dangerous thing I have ever done would probably be when I got on the roller coaster at Boblo. The car was going up the first hill when I was thinking about raising my hands like they do on the commercials. I was in the front car by myself when I reached the top. I was putting my hands up when I felt the bar on my waist move up a little. Even though I felt this movement, I still put my hands up in the air. All I can think of now is that if the bar had not been locked, I may have flipped out of the car and been killed.

Janeire Laronne Gere

A Dare I Took

A dare I took occurred around 1985 when my cousin visited me in the summer. My cousin, then living in Cleveland, decided to climb the garage and jump down, standing up. Looking from the ground up to the garage top seemed to be a piece of cake to jump. First my cousin decided to jump and told me it was nothing. To watch him jump I thought that I could also do that. When I reached the top of the garage and kneeled down readying myself for the jump I was ready to jump. When I stood up it all seemed scary. The ground looked further away compared to what seemed to be the height of the garage when I was standing on the ground. I think it took me 10 to 20 minutes to finally jump. When I jumped I first counted down from 10 real quick and when I reached zero I was airborne for about 4 or 5 seconds. When I reached the ground, I was ready to jump from the garage again.

Janeiro Laronne Gere

A Wild Ride

When I was younger, about the age of four, I had a red and white tricycle and every day I would ride it up and down the sidewalk. One day I got bored and decided I would try something different. So I pulled my tricycle up the stairs one stair at a time. When I got up on the porch, I rode it around a little and then my eyes caught sight of the stairs. And then a surge of energy went through my little body. Suddenly I was no longer bored because I knew what I would do. I would ride my tricycle down the stairs. I thought that it would be so much fun; kind of like a high speed jump; the kind of jumps that Evil Knievel would do. I backed up my tricycle so that I could get a good fast start; I gripped the handle bars lightly and prepared myself for the flying dare devil stunt I was going to perform. I took off and instead of sailing and landing perfectly on the sidewalk like I had imagined. I remember hearing the loud clinking that my tricycle was making as it and I were hitting each and every last stair. I remember finally landing, which seems like it took forever. I remember being sprawled all out on the sidewalk, legs tangled up in my tricycle, looking up at the sun wondering what had happened and thanking God it was over.

Angelic Linnea

**Students Write about Course Content:
Papers in Response to "Admit/Exit Slips" Assignment**

An Occurrence at Owl Creek

Peyton Farquhar didn't escape death. Mr. Farquhar sprang forward with extended arms. He is about to clasp her; he feels a stunning blow upon the back of his neck. A blinding white light blazes all about him with a sound like the shock of a cannon--then all is darkness and silence. Peyton Farquhar was dead; his body, with a broken neck, swung gently from side to side beneath the timbers of the Owl Creek bridge. I feel like Peyton was heading for heaven; that was his destination, and he made it. I really don't understand this story. It has confused me; that's why I only wrote about Mr. Peyton Farquhar's death.

LaKeisha Walker

Farquhar was thirty-five years old. He was also a slave owner and owned a plantation; he was caught for interfering with the repairing of the bridge by the yanks. The single company of infantry decided Peyton Farquhar would be hung. Rope was placed around his neck and a cord tied his hands together. To escape his death, all he thought or daydreamed of was escape. He planned an escape to see his family, but only in his mind he had escaped plenty of times. Really, he was still on the Owl Creek bridge. Hours had passed, it seems, when he was escaping in his mind, but only minutes had passed before his death. Peyton Farquhar was hung and died for trying to stop the Yankees from repairing the bridge. Yes!

Frank E. Smith

In one way I feel Farquhar escaped death. He was there waiting to be hung; he wasn't there in his mind so I guess he put aside what was really going on, and started thinking what would probably happen if the rope broke. On the other hand, he didn't actually escape death, because he died. The story really had me convinced that he had gotten away. I thought the soldiers might have followed him home and shot him. I was really surprised to find out he was still on the bridge and was hung.

Joshua Clark

In the story, "My Life on the Plains," Custer gives a vivid recollection of what happened during the Indian years. He tells how the Indians rampaged through the town and scared the frontiersmen. The frontiersmen then banded together with General Forsyth to punish the Indians. They were barricaded on Beechers Island by the Indians who attacked from all sides. The men put up a brave fight and succeeded in winning the confrontations against the red men.

General Custer did not like Native American Indians. He wanted them kept in their own establishment, but only if they couldn't be killed. In the story, he emphasizes how the frontiersmen didn't waste any bullets because a bullet wasted is a living able-bodied Indian who could scalp them, take their women and children, or stampede their cattle.

Damia Williams

Papers in Response to "Learning Log" Assignment:

Irony means that something is just the opposite of what is presented.

"A Man Said to the Universe" is an ironic poem. Because the author has another meaning in writing the poem, other than saying something to the Universe, it seems the author wants to be analytic or bring out a certain point of his own.

A "Theme" is the main idea of a story, poem, or movie. A Theme is a point the author is trying to express to a reader or viewer.

One theme for "An Occurrence at Owl Creek Bridge" is that a man spying for troops was tortured and then hung because he went on some property that he wasn't supposed to be around during wartime.

The theme for the story "Stephen Crane" was the progress of Stephen Crane's writing career and what transpired in his life during his writing career.

The theme for "A Mystery of Heroism" was that a man could lose his life just for some water during the civil war.

The theme for "A Man Said to the Universe" was that a man wanted to be recognized by the world.

The theme for "Do Not Weep, Maiden, for War is Kind" explains how war really is and that loved ones of troops in war suffer, too.

The theme for "Walt Whitman" is that a poet's writing is his work.

Darchele Henderson

Sample Papers in Response to "Biopoem" Assignment

Victoria

**Black, sweet, outspoken, proud
Sister of eight intelligent brothers
and sisters.**

**Lover of heritage, school, and André
Who feels compassion, innocence,
anger**

**Who needs love, happiness, life
Who fears being hurt, dead, or
unhappy**

**Who gives her heart, help, and
opinion**

**Who would like to see the
world become a better place**

Resident of a beautiful World.

Robinson

Victoria Robinson

Peyton

**White, brave, outspoken
Husband of a proud woman
Lover of his race, his country, family
Who feels death, anger, hatred
Who needs freedom, love, hope
Who fears death, solders
Who gives love, his life, time
Who would like to see freedom.
Resident of Alabama.**

Farquhar

Dinah Doss

Writing to Learn as "Innovation"

Beverley Moseley, Western High

Many "innovative" ideas presented in classrooms today are actually older ideas reworked into more contemporary terms. While it may be true that "there is nothing new under the sun," teachers always are under pressure to make classroom learning fresh and meaningful for the often jaded and unmotivated students of today. Coupled with this, is the sad fact that our students are not remaining competitive in global knowledge about our world's scientific and economic arenas.

How can we address a lack of ability within America's student population? Foremost, to me is the idea that our children must be more engaged with **READING, WRITING, ARITHMETIC, and SCIENCE.**

Writing to Learn is one answer to a burning question that confounds most educators today: How do we make essential knowledge more palatable to our children? Two writing-to-learn activities I used in my teaching this year— one long activity and one brief activity follow:

Activity 1

"INTERVIEWING"

OBJECTIVE

Students compose questions and formulate an interview sheet; this interview sheet is given to another student to fill out or, students can conduct face to face interviews, using their own questions and writing down notes about the responses.

METHOD

Teacher discusses possible questions/information that students find interesting/informative about other people/classmates. Acceptable and unacceptable types of questioning are discussed. Students then write individual formats for interviews they will conduct. The class discusses the "best" interview processes for different situations.

EVALUATION

Teacher collects and compares completed interview sheets. Students practice and discuss the activity and discuss the effectiveness of their first interviews, problems of asking and answering all types of questions, and using interviews to write up profiles.

FEEDBACK

Students are encouraged to find the activity enjoyable and look forward to thinking of better ways to phrase questions about things they want to know about others.

- * Students were told that their interviews would not be graded on content/grammar, etc. There could be no good or bad papers. However, a completion grade would be given for completing each activity thoroughly.

Activity 2 Draw upon prior information to make sense of new experiences.

Recognizing and naming a concept:

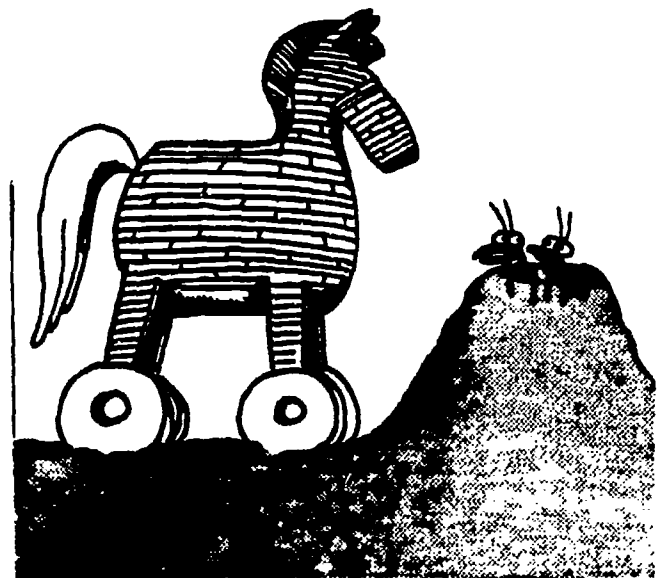
Example: Explaining the unfamiliar.

Fill in a caption for a cartoon.

Share captions in class.

Lesson

THE SAMPLE CARTOON:



Writing to Learn the History of Famous People

Ellen Harcourt, Mackenzie High

We had been discussing heroes and characteristics of heroes. We had read "Narrative of the Life" by Frederick Douglass, several selections by Abraham Lincoln, and "A Mystery of Heroism" by Stephen Crane. The Crane selection included a short explanation of Crane's philosophy of life, i.e., people have no free will; we are products of heredity and environment, etc. I also showed students an interview of Nelson Mandela and brought in newspaper articles about him. After much discussion, questioning by me, we wrote bio-poems on their choice of individuals: Douglass, Lincoln, the "hero" in Crane's story, or Mandela.

Later – we read and discussed the material. I found out what my students needed to know. You won't believe this--my students did not know the meaning of "apartheid". NOT ONE! But -- now they do.

So--

Nelson

Brave, loving, kind, and giving.

Husband of Winnie, and

Father to his children

Lover of the world, his

people, and country

Who feels graceful, committed,

strong

Who needs his freedom,

his family, and his health

Who gives his all to stop

apartheid slavery, most

of his life, and freedom

Who would like to see

peace in this cruel cold

World, and peace between

Whites and Blacks

Resident of Africa

Mandela

Wanda Close

Nelson

Caring, leader, strong, willing

Husband of Winnie

Lover of liberty, God, good

Who feels determined, aggravated, fulfilling

Who needs rights, judgement, listening

Who fears, getting shot, not given freedom, or going back to jail

Who gives comfort, leadership, time

Who would like to see people free, judgement rule, answer his people's questions.

Resident of South African

Mandela

Staci Gray

Frederick

Caring, devoted, courageous, concerning

Son of a slave

Lover of God, freedom, and triumph

Who feels hope, concern, and understanding

Who needs freedom, love, and caring

Who fears hate, slavery

Who gives concern, love, and understanding

Who would like to see, peace, freedom, and happiness

Resident of slavery

Douglass

DeShawn Buford

Abraham

Unique, generous, and caring

Husband of Mary

Lover of God, life, United States

Who feels proud, self-conscious, famous,

Who needs love, respect, personal power

Who fears frustration, crises, potentialities for harm

Who gives honesty, leadership, thanks

Who would like to see peace, dignity, human rights

Resident of Springfield, Illinois

Salenna Brocks

Abraham

Honest, generous, faithful, and caring

Father of the Emancipation Proclamation

Lover of our country, his wife, and freedom

Who feels disappointed, doubtful, and deserted

Who needs assurance, faithfulness, and protection

Who fears betrayal, secession, and defeat

Who gives love, freedom, and opportunity

Who would like to see togetherness, freedom, and our Union preserved

Resident of the White House

Lincoln

Gerald Shannon

The Natural Extension!

Some of my students asked if they could write bio-poems about themselves after they had written about authors, characters, or heroes. So they did. We shared some of them. Here they are. I'm putting them in folders and on the board, and asking students to write final drafts to turn in for a grade. I was delighted!

Andre

Smart, curious, creative, antisocial

Relative of everyone

Lover of books, art, history, writing

Who feels solemn, anger, determined

**Who needs understanding, to get in and out of high school
and college quickly,**

(A ride home today)

**Who fears being unsuccessful, the loss of my peers, getting
caught up in drugs**

Who gives love, encouragement, my ideas

**Who would like to see a Commodore Amiga computer in
my room, another galaxy, peace in this crazy world**

Andre Jones

DeShawn

Caring, loving, devoted, high tempered

Relative of Lizzie Buford, son of James Wingo

Lover of Cassandra Briggett and Kim Briggett,

Who feels discouraged, helpless of life

Who needs help in understanding life itself, money

Who fears death and losing Cassandra Briggett

Who gives all my time to my hobby and my girlfriend Cookie

Who would like to see

A lot more parts of the world

**Me move and get my own place in the next two or three months with my
girlfriend**

To see another planet visited in space and live a good wealthy life.

Resident of the planet Earth

Last name Buford

DeShawn Buford

Verdricka

Funny, moody, outspoken, and weird

Sister of Noah and Marchanda

Lover of television, reading, and boys

Who feels lonely, distant, and confused

Who needs more attention, understanding, and to be heard

Who fears snakes, mice, but no man

Who gives her love, trust, and honesty

**Who would like to see my niece grow up, my graduation,
and my family coming together**

Resident of Detroit

Smith

Verdricka Smith

The assignment "Found Poem" asks students to find any group of words or sentences in prose form from a published source and create a poem using only the "found" words or sentences from the source.

Found Poem

1. **(Words from "American Hunger" Literature, 1984, p.609**

My FIRST
glimpse
of the
F L A T

BLACK

S T R E T C H E S

of Chicago

DEPRESSED

and

DISMAYED

me

Found Poem

2. (Words from The Birth of Romanticism Literature 1984, pg. 102)

The Eighteenth Century
had
been the Age of Reason
also called
Neoclassical Age . . .
. . . artists, and philosophers
began to
REBEL
against classical conventions
which emphasized Reason
OVER
emotion, and general
OVER
particular, and society
OVER
N
 A
 T
 U
 R
 E-----

Lamont Christopher

Found Poem

3. (Words from European Arrived in West Africa Literature, 1500, p 253)

The African States
had always permitted
S - L - A - V - E - R - Y
Slavery

Lives

Anger

Vicious

Racist

Your Ancestor

Prisoner of war:

debtors

and convicts

which could be

made into

S - L - A - V - E - R - Y

of

Dark Skin

Black

Nichelle Jones

Found Poem

4. (words from The Detroit Free Press, April 26, 1990, p. 67)

I CAN'T GO!

to softball practice

until

I find my

LUCKY CAP

Mom!

I CAN'T

hit the ball

unless I'm wearing my

LUCKY CAP!

Shanon Miller

Found Poem

5. (words from The Detroit Free Press, April 23, 1990, pg 4A)

**The
Blue - and - Green
Earth
hung by
a
thread.
One-by-One
Blindfolded
Children
Swing sticks
At it
Wildly until
Candy falls
to the
ground!**

Traci Templeton

Writing and Thinking
Anne Platt, Mumford High

Writing Assignments

1. After reading a Detroit Free Press article on the freeing of Nelson Mandela and a literature assignment on Frederick Douglass, students write an essay comparing the two freedom fighters.

2. After reading the poem "The Negro Speaks of Rivers" by Langston Hughes, students write about their knowledge of the black experience and what they know of the Detroit River and rivers in general.

3. Journalism Class--Community Building Activities.
Complete the following and share in peer groups:

"Don't feel bad . . .";

"What if . . .";

"Don't you hate it when . . ."

(To be used occasionally))

Writing is Active Learning **Norman Grange, Kettering High**

Writing to learn can smash passivity in the English classroom. Unlike homework completion questions, it cannot be copied from others or done by rote. Unlike the multiple choice format, it demands that students be engaged with subject matter. It is one sure way of checking that students have read their content and have thought about what they have read. It is also a sure way to make sure that everyone will have something to say in a group discussion; at least, they can simply read aloud what they all have written.

Side benefits from frequent writing to learn can be that students learn to respect each other's opinions and interpretations, to organize and sub-divide tasks, and to mobilize their formative learning experiences into production of polished, final-form writing.

Writing to Learn in Teaching an Autobiography

I had students in a senior English class write first what they already knew about Malcolm X. They told of previous instruction, earliest memories, lingering impressions. Very few of them had detailed knowledge; some had never heard of him.

Then they heard a recording of his "Ballot or Bullet" speech given in Detroit on April 12, 1964. They discussed the study questions about the content of the speech. They examined the F.B.I. surveillance document and Detroit News article on the speech. Some discussion developed.

Then they wrote about how their feelings, impressions, etc., had changed after hearing the man speak for himself. Some of their work follows:

Example 1

After hearing Malcolm X's speech "Ballot or Bullet", I have more knowledge about why he did things the way he did. From my point of view, the speech was designed to make Blacks mad. To make them realize what really was

going on. I know now of his attitude towards "sit-ins and white oppression." I know that he wanted Black unity to be first, regardless of religion. The speech made me mad. I see what he meant when he said Blacks were creative. I am all for what he was saying.

Example 2

The only thing I knew about Malcolm X is that he fought for civil rights. He believed in violence and he was killed. I first heard about him in middle school through some friends. If he fought for civil rights, then I feel he died for a good cause.

After the speech, I found out that Malcolm X believed in Black nationalism. I can accept the fact that Malcolm X felt that we should rule ourselves and come together as one, but I can't accept the fact that he was so strongly for violence. One thing I really like about Malcolm X is that he spoke his mind.

He really spoke his mind. Politically he felt that we should run the community, economically Black people should operate businesses in their own community and the money they make should be spent in their own community. Malcolm X says Blacks need political maturity and that's true. So until then, Blacks will never be able to cope with white oppression.

Example 3

After I heard the speech, I realized that to me Mr. X's teaching and his ideas were very strong and correct. At first, I thought Malcolm was a radical but now I would call him a realist; he said stop singing and start swinging because anyone can talk and tell you what they could, would, and should do, but only people who are really with you would be ready to fight. In all, I think my overall view of Malcolm X is better than it used to be.

Norman Grange continues to develop writing to learn: he explains:

Following this procedure, I am sure that students have thought about the content rather than just listening for "right" answers. This worked pretty well – now, on to the book, The Autobiography of Malcolm X.

Fortunately, I was able to use the study questions that used to be the first assignment as a springboard to discussion and writing, thus not having to completely sacrifice my past labor and knowledge.

I divide the class into small groups of three or four. I assigned a chapter with topics to a small group; each group divides the chapter topics among themselves. They read the chapter and write about the topics, reacting to and interpreting what they read. Then they share their notes with each other and prepare a presentation to the whole class, again subdividing the presentation among themselves.

As groups make their presentations to the entire class, other class members take notes. At the end of the presentation, class members ask questions and/or make their own comments. Some even add reactions in their papers about the chapters for which they are responsible. Evaluation is based on a combination of the paper written, the oral presentation, and the notes taken. A more product-oriented summative paper is done at the end.

Obviously, a thousand variations of distributing reading assignments are possible. All students in a group could read each chapter and compare their reactions. Novels, short stories, and nonfiction might be handled in a similar manner.

36 Ways to Use Writing to Learn in English Classes

Norman Grange

Non-Fiction Selections

Have students:

- Write down understandings of major sections
- Write summaries and/or reactions to reading
- Discuss differences in interpretations in small groups
- Defend a side of an issue
- Write main ideas
- Write situational examples of concepts
- Write summaries
- Write what they don't understand in questions
- Write comparisons between selections

Fiction

Have students:

- Write down their feelings about events and characters
- Write plot summaries
- Defend or condemn characters' actions
- Discuss differences in peer interpretations
- Write about connections between fiction and experience
- Write about difficulties in understanding
- Write theme summaries
- Write about characters' traits, motivations
- Compare characters in other stories and in "real" life
- Write evaluations of sections and of whole works
- Analyze and evaluate figurative language and imagery

Poetry

Have students:

- Write prose versions
- Write interpretations of sections of reading and of whole works
- Write what they don't understand ("Say what?")
- Write, share, and discuss differences in their interpretations
- Write a poem about the same subject and share in groups
- Analyze and evaluate figurative language and imagery
- Write summaries and interpretations and present to the class (individually or in groups)
- Write plans for oral recitation
- Write to a poet

Testing

Have students:

- Write test questions for class discussion
- Write understandings and misunderstandings of sample test questions, format, and context
- Write reactions to tests and/or testing situations
- Write lists of unfamiliar words
- Write ideas for improvement in the class tests
- Write to test-makers
- Write your own test questions and write answers
- Write down your own test strategies - how they do tests - and share them

Writing to Learn in Spanish Classes

Norman Grange

I also used writing to learn in a Spanish 4 class to help me determine what students understood and did not understand about the preterite and imperfect tenses of Spanish verbs. These concepts are some of the main meat of the grammatical content of the course, and students were still having some difficulty with them.

Students' papers were very revealing. I learned that the difficulties most of them had were not so much in knowing the endings, but in telling the tenses apart and knowing when to use them. There was also some confusion between these tenses and some other grammatical concepts. The most revealing thing students wrote was that they understood the tenses when we worked together as a whole group, but felt lost independently.

What does this imply for remediation? It implies that some old-fashioned drill and practice are necessary, but also that the students need some kinds of work to make them less teacher-dependent and more involved creatively. Perhaps some group work, and one-on-one, and independent work helps more than we know.

The students also made some general comments about the class when I asked for an informal response to it. These made me feel good, because students apparently like the class more than I thought they did.

Section III

Writing in Math Classes

Tracy Carpenter, Mackenzie High School
Jean Ellis, Ruddiman Middle School
Kristine Murray, Mumford High School

Math is a non-traditional subject in which to use writing. Nevertheless, writing about any subject, including math, can be used to increase and deepen students' understanding of the content. Writing to learn allows people to utilize more of their natural senses, i.e., seeing, hearing, touching, etc., in an endeavor to learn. Janet Emig states in her article *Hand, Eye, Brain: Some Basics in the Writing Process*, that it seems clear to her that "... we see and hear, as we move our hands, with our brains." This suggests to us that we may need to find ways to teach math and uses our senses more as we do so.

In the section that follows, we have collected various activities that involve writing to learn in mathematics; also included are descriptions of the activities, comments on the activities and some sample papers from students.

WRITING TO LEARN ABOUT MATH

Kristine Murray

#1: File Cards (Geometry)

Objective: To write geometry terms and develop a dictionary of terms for a geometry chapter.

Materials: Index cards, geometry book

Procedure: Students are given a list of vocabulary words for each chapter in the geometry book. Using one index card per word, the students write a word on one side of the card. Students then use cards for reference while working in class and on homework and possibly on some tests. This allows students to become comfortable with the new vocabulary and its uses without having to refer to their books while working.

#2: Written Explanations (used in any math class)

Objective: To have students write procedures for solving mathematical problems using only words.

Materials: Pencil, paper and examples of work

Procedure: Write out the process to follow in solving the following problem: $2x + 6 = 18$
Example of answer: To solve the problem $2x + 6 = 18$ you would first subtract 6 from both sides of the equation. On the left side this would zero out the 6 and on the right side eighteen minus 6 is equal to twelve. You then divide both sides by two, leaving x on the left and the right side equal to six. The answer to the problem is x equals six.

#3. Writing Story Problems

Objective: To have students create their own story problems

Materials: Pencil and paper

Procedure: This activity is used while studying almost any area of math but is most useful when studying problems of distance, cost, or measurement.

1. After having introduced a specific type of math problem, ask each student to create a story problem that is similar to the formula presented in the lesson.
2. Students not only create the problem but they must also workout the solution to the problem and provide the solution when turning in the assignment.
3. These problems are then compiled and demonstrated in class to help other students having a difficult time with the mechanics of working the specific type of problem from the formula alone.

ACTIVITY #2

WRITTEN EXPLANATIONS

This activity takes ten minutes class time.

In introducing this activity, I explained to my students that I was taking a writing class and that they would be my guinea pigs for this new assignment. The response I received was, "But, this is math; this is not an English class." I explained that their writing would help me to see if they understood a concept I had taught in class. While they moaned and groaned, I put the following problem on the board and said, "Solve it in words."

$$2x + 4 = 12$$

The first question I received was, "Can I solve it first?" I said yes and the students began to write. When the students finished, a few read aloud to the class what they had written; some students commented when steps were missing; on the whole, students found they knew the process required to solve an algebra equation.

As the class was preparing to leave for the day, many students asked, "Can we do this again?" I was glad they were excited about writing in math class.

Samples of Students' Written Responses:

- I.
1. You write the problem down
 2. Write down $2x = 12-4$
 3. Subtract $12 - 4$
 4. _____ write problems with what you have _____
 5. It would read $2x = 8$
 6. Divide each side by 2
 7. Then you give your answer
 8. $x = 4$

II. Side 1/Side 2

1. $2x + 4 = R$
2. $2x + = 12 - 4$
3. $2x = \underline{8}$
4. $2 \quad 2$
5. $x = 4$

Two X plus 4 equals twelve. First you must find the number you want to get rid of which is four. Subtract 4 from both sides. On side one positive four and negative four cancel out leaving you with two X on side two. Subtract 4 from 12 leaving you with eight. Now you want to be left with an X and you want to know what X is equal to. So divide 2 into both sides on side one. Both two's cancel out leaving you with X; on side two, 2 divided into 8 is 4, and that is your answer: $X = 4$

III. The problem $2x + 4 = 12$.

The object is to solve for the unknown variable x .

Several steps are used:

1. To make the variable stand along with its correspondence, you must subtract four from both sides of the equal sign.
2. The equation will now equal $2x = 8$.
3. Divide both sides by 2.

$$\underline{2x} = \underline{8}$$

$$2 \quad 2$$

The answer will be $X = 4$.

$$2x + 4 = 12$$

$$\underline{-4 \quad -4}$$

$$\underline{2x} = \underline{8}$$

$$2 \quad 2$$

$$X = 4$$

IV. $2x + 4 = 12$

$$2x + 4 - 4 = 12 - 4$$

$$2x = 8 \quad \underline{2x} \quad 8 = 4$$

$$2 \quad 2$$

Two X plus four minus four equals twelve minus four. The result is two X equals 8. Now divide two into 8 and your result is four.

V. $2x + 4 = 12$

$$2x + 4 - 4 = 12 - 4$$

$$2x = 8$$

$$X = 4$$

Two X plus four equal twelve. Two X plus four minus four equal twelve minus four. Then you are left with two X equal eight and your final answer is four because you divide eight from two.

WRITING ACTIVITIES AND TEACHER COMMENTS

1. Writing Activity:

Provide an incorrectly solved problem. Then have students write how to correctly solve the problem or explain why it is incorrect.

Comment:

This activity is beneficial to determine students' understanding of concepts.

2. Writing Activity:

Flow charts - Students can write information into flow charts to solve a problem.

3. Writing Activity:

Write a new problem on board. Have students write at least three questions about what they would like to know in order to solve the problem.

4. Writing Activity:

After having the students do a set of problems, have students write out numbers using words.

Example: 2,346 - two thousand three hundred forty-six

 3.46 - three and forty-six hundredths

Comment:

The success is two-fold: First, it is a success because the students do the problems without hesitation. Second, it shows exactly where the students are weak; i.e., commas, spelling, place values, etc.

5. **Writing Activity:**
Write a personal or business letter to someone describing how to solve a problem. This should incorporate letter writing format. Provide a model letter to the whole class.

Comments:

Students did extremely well; they read their letters aloud in class and discussed them.

6. **Writing Activity:**
Clustering - Beginning of school year
Example: Large poster board
Strips of paper - paste

Students write a concept that they expect to learn during the year. Add more concepts during school year. Post on bulletin board to demonstrate how learning is accumulating during the year.

Comments:

Let strips be a reward.

Student of the week writes next strip.

It becomes a status symbol to write a strip for the class.

7. **Writing Activity:**
Question - Describe and illustrate terms.
Example: What is the function of a decimal point?
What is a variable?
Why do we take fractions to the lowest terms?

8. **Writing Activity:**
Math journal - Keep all math-related activities plus notes on them in a journal.

Comments:

Students very responsive.

Be careful to focus their writing on math activities and questions about them.

Choose subject area topics for students to write about, i.e., checks, maps, mileage, games, sports scores, etc.

9. Writing Activity:

Beginning of school year. Students write their feelings about math and what they anticipate will happen in class during the school year. From time to time in the school year, they write how they feel about math. Raise questions about their entries. Talk about the connection between learning about and liking a subject.

10. Writing Activity:

Beginning of the school year, with the issuance of textbooks: find at least ten items in this book that may help you to have a successful year. Read to predict what will be learned with the class.

Section IV

Writing about Social Studies Content

Mary M. Evans, Kettering High School
Kwasi Machupa, Finney High School
Lillian Williamson, Mumford High School
Beverley Moseley, Western High School (English)
Arbrie Griffin, Finney High School (English)

Introduction

We are part of a group of inner-city high school teachers who first met in the winter and spring of 1990 as members of a writing-to-learn class offered in Detroit by the University of Michigan.

During this course, we became convinced of the value of writing to learn in Social Studies content instruction. Writing to learn increases student involvement and participation with subject matter and improves critical thinking skills about it. Writing can help students activate their learning. When students see, hear, and read for the first time about something, and then write about it too, they put their "new" information in personal perspective. Writing about content gives students a reason to recall and reflect upon important ideas presented in class.

In this chapter we share with you some writing-to-learn techniques that we have tried out with our students this semester; we include some students' writing to illustrate their responses to writing to learn in our classes.

Activity

Writing to learn (content)

9th Grade World History

Procedure: Daily Writing in a Log (or Journal) about Reading Assignments to develop the habit of research

- Step #1** Student enters in log title of chapter being studied and, then, title of section and number (since each chapter is broken down into sections).
- Step #2** Students develop a question (gives to the teacher at the beginning of class) about the particular section of the chapter being studied.
- Step #3** Students hypothesize (think critically) in their logs about what the answer to the question might be.
- Step #4** At the end of class discussion about the questions, students refer back to their answers, either changing them, elaborating upon them, or explaining them in more detail in their logs.

Teacher checks the logs daily adding questions and giving comments. Each day some questions and answers are read aloud from logs to encourage general discussion about the text.

Student Sample
from Daily Writing in Log of Questions about Assigned Reading

Chapter: Section:
XXIII Science and the Age of Reason

"Why is it important that several branches of science moved forward concurrently?"

Question for Rethinking Reading

What was the importance of new discoveries and inventions in the 17th and 18th Centuries? The new discoveries were linked in people's lives; they helped society understand more applications, such as electricity and the light bulb, Janssen and the first microscope. Without relating some of these inventions to each other, we would not have many modern things we take for granted now or cures for diseases.

Critical Thinking/Study Question for Rethinking Reading

What is a capsule history of mathematics from ancient times to 1650?

The Sumerians were skilled mathematicians. They invented many mathematical ideas that we still use today. The Egyptians surveyed the land often, developing geometry to measure the boundaries. The contributions of Indian mathematicians to world civilization are among the greatest of any people. They developed the number symbols that served as the basis for our own numerals.

Activity

Writing to learn to focus on content for quiz or test.

Procedure:

- Step #1** Student copies title of chapter to be studied.
Purpose: To get students to notice subject of chapter
- Step #2** Student copies title of chapter section and number of page (each chapter is broken down into sections)
Purpose: To get students to notice the given focus of the chapter
- Step #3** Students select and copy one appropriate review question from the end of chapter section – students answer the questions in their own words or restate the questions in their own words.
- Step #4** Students share and then store their questions and responses in portfolio for future review and discussion and as study aids for test or quiz.
These "special focus responses" papers are not graded by teacher-- they represent student notes and are the basis for class discussions.

Lillian Williamson
Mumford High School

Black History - Three Days of Writing to Learn

Objective for Activity I and II:

Develop awareness of accomplishments of Blacks in society.

Sequenced Writing Activities:

Activity I

- A. Read a condensed biography on Coretta Scott King's educational background and her role in the Civil Rights Movement.
- B. Define vocabulary terms and ask focus questions based on reading.

Activity II

- A. Read a condensed biography on the life of Tom Bradley.
- B. Respond to focus questions and summarize what Bradley accomplished.

Activity III

- A. Summarize one newspaper article from "Africa, Cradle of Black History".
- B. Choose one article from the Detroit News February 5, 1990 edition, titled "Africa, Cradle of Black History".
Read the article and write a summary of what you learned from it that you didn't know before.

**Kwasi Machupa
Finney High School**

Writing to Learn (Individual Awareness and Appreciation)

Activity: Write a letter to yourself or a part of yourself.

Dear Feet,

How are you? I guess I should know; you belong to me. And over the years, you have always been there for me. You carry me around everywhere and you've never let me down. When I stand too long or walk too far, however, you do hurt a little. But that's normal. It's hard finding shoes for you because you're so large. But I promise to never wear too small or too big shoes. You will never have to wear any K-Mart specials or Pro Wings or any kind of cheap shoe ever! You're the only pair of feet I have, so I'm going to make sure you look good! After all, without you where would I stand? Without you, I couldn't stand!!

**Your friend,
Christopher Crosby**

Dear Body,

I'll make this short. We need to get our act together. What we need to do is exercise more often; take in as much comfort as possible; feed on the most up-grade foods; protect one another from emotional and physical harm. Now you know what I need to do, so let's get busy!

**Sincerely,
James Aikens**

Dear Hair,

This is your body, Kiesha, talking to you. I am writing to apologize to you for what I have done to you. I am sorry for putting chemicals in you. But if I didn't put chemicals in you, you would grow very long and very bushy or knappy. By putting chemicals in there, I am sort of helping you out. Without it, you would come out when I comb you. But I am sorry for hurting you anyway.

**Take Care of Yourself,
Kiesha**

Dear Feet:

I would like to apologize for my inability to appreciate your usefulness. An old saying goes, you don't appreciate something until it's gone. I don't want that to happen with you. I never thought about how much I use you; I get to school, to work, and to a lot of other places by using you. I hope I will never find out what it's like without you.

**Since I'm yours,
Your owner
Natasha Lawton**

Dear Hair,

You know I forgot to tell you, but you are looking pretty "fly" today. You have been turning heads for the last few days. So, I take it I have been keeping you in good condition. I know sometimes you're a little dry, but you know, Mr. Scalp can't take too much of that moisturizing gel.

Hair, you're great and I love you for assisting in making me look great. By the way, you have grown a great deal since last month. I admit the growing is fine, but not so quickly all of the time. Okay? That ten dollars per week for a haircut can really break me. I promise never to chemically process you again; you are not so bad natural. I know sometimes I cover you up, but you can become very unattractive at times, too. But, remember, you're mine so you must be special. Right!!

**Love and Blackness,
Ebon Council**

Dear Feet,

This is Greg talking to you. I am writing to you to both praise and apologize.

I am apologizing to you because every single day of my life, you get me from place to place no matter how you feel. I let you walk over and through all types of terrain. You get very weary and yet I force you to go on.

I am praising you because through all this, you haven't quit on me. You stick around and do your job.

**Your Master,
Greg White**

Beverley Moseley
Western High School

TITLE OF

ACTIVITY: Involvement in Black History Month by every student in class

OBJECTIVE

Students compose and present a five (5) minute first person autobiography/speech in the persona of a major Black history character.

METHOD

Introduce purposes for celebrating Black History Month; students receive a Black history character to research and write about. Information can be obtained from reference books, magazines, biographies, and other written or oral sources. An individual presentation is to be written by each student and delivered to the class through a first person narrative. Students are permitted to fictionalize certain areas of characters' lives because they speak to the class as if their characters are still alive and living today. Some students give their presentations in clothing appropriate to the speaker they become.

EVALUATION Students in the class evaluate each presenter on an evaluation sheet. Teacher also evaluates students. Evaluation sheets are not signed. All sheets are given to presenters at end of speech.

FEEDBACK

Students discuss effectiveness of this writing/speaking activity as a means of promoting research, writing, speaking, and presentational communication skills.

**RESEARCH, WRITING, PRESENTING BLACK HISTORY
IN THE FIRST PERSON
FIVE STUDENT SAMPLES:**

Reverend Jesse L. Jackson (from Beverley Moseley's class)

Good afternoon, Ladies and Gentlemen. My name is Rev. Jesse L. Jackson. I am a Civil Rights Worker. Before I tell you about my career and accomplishments, let me tell you something about my early background.

I was born in Greenville, South Carolina on October 8, 1941. I was raised by my mother and step-father. During my childhood, I was a very sensitive and aggressive child, and at an early age, I became aware of things around me that many other children did not notice.

In high school I ran for whatever school office was open; in the ninth grade, I was elected president of the honor society. Sports also had a major impact on my early development. I was an excellent athlete. When I graduated from Sterling High School in Greenville in 1959. I was offered a contract to play baseball for the New York Giants. The Chicago White Sox offered me \$6,000 to play for them. When I found out that they offered white ballplayers \$90,000, I refused their offer.

Instead of playing major league ball, I accepted an athletic scholarship to the University of Illinois in Chicago. Then, I found out I could not be a quarterback in the North. Only white players could have this position. I went back and forth to the Black Agriculture and Technical College of North Carolina at Greensboro and graduated with a degree in sociology. Then, I accepted a Rockefeller Grant to the Chicago Theological Seminary to become a minister.

I met Jacqueline Davis, my future wife, at the (TCNC) in Greensboro. We have five children: Jonathan, Santita, Yusef, Jackie Jr., and Jesse Jr. Their ages range from 13 to 26 years.

My career in Civil Rights began in 1965. I became an organizer for Martin Luther King in the SCLC in Chicago. When Martin Luther King returned to the South, he left me to run Operation Breadbasket, the economic army of the SCLC. I organized many boycotts of American businesses that did not hire or promote Blacks; some of these companies were Coca Cola, AT&T, and the Red Rooster Supermarket Chain in Chicago.

In 1967, I received my own ministry. In an old auditorium on Chicago's South Side, I began speaking Saturday morning on a regular basis. In 1970, two years after the death of Martin Luther King, I was a well known leader of the SCLC. In 1971, I announced my plan for a new organization. It was to be called PUSH. It would be officially born on Christmas Day 1971.

In 1971, I was the first Black to run against Mayor Richard Daley of Chicago. This was my first experience in the political arena and I lost by many votes, but at least I tried.

In 1983, I went to Lebanon to free the navigator/bombardier Lt. Robert O. Goodman, Jr., a Black American naval officer. I was successful. I also talked with Cuba's leader, Fidel Castro, in 1984. During my visit, Castro released 48 prisoners, 22 of whom were American.

I went on a tour to Africa in 1986. I traveled through hunger-stricken areas and saw people dying of starvation. I also met with Zimbabwe Prime Minister Robert Mugabe.

I have been a Presidential candidate twice, in 1984 and 1986.

**Billie Holiday (from Beverley Moseley's class)
(Eleanora Fagan)**

Hello, Ladies and Gentlemen. My name is Billie Holiday. My original name was Eleanor Fagan. I am a pioneer in the jazz music field. Before I talk about my career and accomplishments, let me tell you some things about my background.

I was born in Baltimore, Maryland on April 7, 1915. I lived in the ghetto and obtained my musical education in the public schools of Baltimore; then I moved to New York when I was twelve years old. I began singing professionally at the age of fifteen in nightclubs in the Harlem community.

My parents, Clarence Holiday and Sadie Fagan, were married for three years, but were separated when I was still a baby. My father, Clarence, was a professional jazzman. My mother, Sadie, worked as a domestic in New York City. I grew up in Baltimore where I suffered the first of many traumatic experiences. When I was ten years old, I was raped by a forty-year-old man who lived in the neighborhood. He was sent to prison, and I was sent to a Catholic "correctional" home. It was during these early years that I got my name of Billie. My father had called me Bill because of my tomboy ways, and I changed it to Billie after Billie Dave, my silent film idol.

When I was thirteen, I developed a consuming interest in music. I was allowed to listen on the parlor phonograph to records by Bessie Smith and Louis Armstrong, who formed a lasting influence on my art. When I was eighteen, I made my professional singing debut in lower Manhattan at ten dollars a week. One of my biggest fans, John Hammond, the well-known jazz impresario, arranged for me to make my recording debut with Benny Goodman in November of 1933. I continued singing in Harlem nightclubs but was little known outside this circle. I married three times, to musicians Jimmie Monroe and Joe Guy, and to a businessman Louis McKay.

My international reputation began with the series of recording dates that Hammon set up with small bands. The formula was simple. Some of the best musicians were chosen from the band—Count Basie, Duke Ellington, Fletcher

Henderson, and Benny Goodman. The material we recorded was the popular songs of the day and what resulted was some of the most outstanding jazz singing of all time. I was unusual in that I didn't perform songs in a "straight" fashion, that is, sing a composition as it was written. but I would approach it as a jazz instrumentalist. I altered melody, harmony, and rhythm. During these years, I was a vocalist with the orchestras of Count Basie in 1937 and Artie Shaw in 1938. In the 1940's and 1950's I toured as a single performer.

While I was enjoying international recognition, I was falling into deeper personal tragedy. I found no long-standing happiness in my relationships with men, and my narcotics problem had become more serious with my addiction to heroin. Despite my addiction, I still produced great artistic and commercial success in my recordings of "Fine and Mellow" (1939) and "Strange Fruit" (1939). The latter was a powerful protest song against southern lynching and racial discrimination. I also appeared as a maid in the feature film "New Orleans" (1947). An arrest for heroin addiction on May 2, 1947, led to my commitment to the Federal Rehabilitation Establishment at Alderson, West Virginia for a year and a day. Ten days after leaving Alderson, I played before a packed house at Carnegie Hall, New York City.

Charlotte Buffin
(Student's name)

Mary McLeod Bethune (from Beverley Moseley's class)

Hello Ladies and Gentlemen.

My name is Mary McLeod Bethune. I'm a U.S. educator. I'm active in National Black Affairs, and adviser to President Franklin D. Roosevelt on the problems of minority groups. He counts on me for advice and information, and I was always welcome whenever I went to the President with any problems pertaining to legislation involving Negroes and other minorities.

Let me tell you a little about my background. I was born July 10, 1875 in Mayesville, South Carolina. My parents were slaves, but when freed, they bought farmland and built a house. My mother and father had unusual qualities which they passed on to their fifteenth child. My mother was a true matriarch with a gift for organization.

I was the fifteenth of seventeen children. Older children were slaves, but after Emancipation, we grew up there free. I graduated from the Scotia Seminary at Concorde, North Carolina in 1893. I was an instructor at Haines Institute in Georgia 1896-1897, Kindell Institute South Carolina 1897-1898. I was President of Bethune College 1932-1942 and again 1946-1947; I was Emeritus Trustee and chairman of the Advisory Board until 1955.

In my early schooling, I studied two years at the Moody Bible Institute in Chicago and, then, returned south to teach. After teaching in the southern schools in 1904, I opened an Institute for Girls at Daytona Beach, Florida, which merged in 1923 with the Cookman Institute for Men, Jacksonville, Florida to form Bethune Cookman College at Daytona Beach.

Speaking on behalf of the college from platforms in every part of the country, I became known as an inspiration and an unforgettable figure. My interests extended into so many areas as to cause a group of women journalists in 1950 to vote me one of the most influential women in the nation. I served as

president of the college until my retirement in 1942 and I was Director of the Division of Negroes Affairs of the National Youth Administration 1936-1944. During World War II, I assisted the Secretary of War in selecting officer candidates for the Women's Army Auxiliary Corps.

In conclusion, I feel I helped us come a long way in my lifetime.

Zanda Steen
(Student's name)

Josephine Baker (from Beverley Moseley's class)

Hello Ladies and Gentlemen.

My name is Josephine Baker. I was born on June 3, 1904 in St. Louis. During my early life, I lived in poverty. I had very little education.

I was a U.S. born naturalized French dancer and singer. I symbolized to many the beauty and vitality of Afro-American culture, which took Paris by storm in the 1920's. As a child, I began to develop a taste for the flamboyant, that later made me famous. As an adolescent, I decided to become a dancer and at sixteen, I began touring with a travelling dance troupe from Philadelphia.

In 1923 I joined the chorus of a show in Boston and advanced steadily in my career through "Chocolate Dandees" on Broadway and the floor show of the Plantation Club in Harlem.

In 1925 I began dancing in Paris where I remained essentially a Parisian and was naturalized French in 1937. I sang professionally for the first time in 1930 and made my screen debut as a singer four years later. I starred in a light opera and made several more films before World War II.

During the German occupation, I worked with the Red Cross, and the resistance, and also as a member of the Free French Forces, and entertained troops in Africa and the Middle East. I was awarded the "Croix de Guerre" and the "Legion of Honor" with the rosette of the resistance.

After the War, I devoted much of my energy to life on my estate in Southwestern France. It was at first an animal sanctuary, but in 1950 I began to adopt babies of all nationalities. I then began to call it my "rainbow family".

I retired from the stage in 1956, but later was talked into returning to star in Paris once again in 1959. I then had my autobiography published. I returned several times to the United States during the 1960's to participate in civil rights demonstrations and in 1973 I made a triumphant return to the New York stage.

Mary McLeod Bethune (from Beverley Moseley's class)

I was born July 10, 1875 in Mayesville, South Carolina. I am a child of a former slave. I was the first child in my family to be born into freedom. I lived in a three room log cabin. My parents' names were Patsy and Sam McLeod. At the age of nine, I could pick 250 pounds of cotton a day. I was very eager to learn how to read and write. But there was no school for colored children in Mayesville until I was eleven years old.

The school for colored children was beyond the railroad tracks. I had a colored teacher in charge; Miss Emma Wilson was her name. I was very impressed when everyone called her Miss Wilson. I have never heard a colored person called Miss. I attended this school until Miss Wilson taught us all that she thought she could teach us.

Graduation day was a proud day and a great social event for all the colored families in that community. With the money for a scholarship offered by white women, I went to college at Scotia Seminary in Concord, North Carolina. I graduated from Moody Bible Institute in 1895. I taught in southern schools until 1904 when the Cookmen Institute opened to form a school for girls only.

I married a man by the name of Albertus Bethune in 1897. My husband worked at a local dry cleaning store. He did this to help his brother through college. We set off for Savanna, Georgia, where he was offered a teaching assignment.

When I found out that I was pregnant, I decided to stay home and raise my baby boy. When my baby was nine months old, I decided to go back to work at the missionary school. My friend would take care of the baby during the day. Later, taking my son and \$1.50 I set out for Daytona Beach, and this is where I built my own school.

I was the first woman in education to emphasize the importance of industrial training for Negro youth. So education in my school was about farming, cooking, sewing, care for food and health, and hands-on skills. On

October 3, 1904 my school was opened, and I called it the Daytona Education and Industrial School for Negro Girls. And I was the principal. I had a student body of five girls that ranged in age from eight to twelve years old; also, there was one little boy, which was my son, Albert McLeod Bethune. My school later merged with the Cookman College, where I was president until 1942.

In 1935 President Franklin Roosevelt named me Director of the National Youth Administration's Division of Negro Affairs. During World War II, I helped the Secretary of War in selecting officer candidates for Women's Army Corps. In the 1940's, I was Vice President of the NAACP.

I have received many awards in my life. I have taught many young students about a lot of things. This is my conclusion. I hope young people can gain from all the things I have done in my past. I hope in the future that everyone can get along with each other no matter what race or nationality they are.

Lucinda Morgan
(Student's name)

Activity: Students see film documentaries and write responses to them. They read their responses aloud in class and talk about them.

Student Sample #1: CRY FREEDOM (from Arbrie Griffin's class, Finney High School)

Before watching the movie "Cry Freedom", I did know a little about the nation of South Africa and their ways of governing people, but not enough.

As I watched this movie, I learned more about political persons who govern the Black Africans. I also gained more knowledge about some of their great leaders. Steve Biko was an inspiration among his Black brothers. He inspired them not to accept the drudgery and unfairness that their so-called "government" was putting them through. In South Africa, there is no such thing as the pursuit of happiness, peace and tranquility, or freedom of speech. Black Africans are judged by the color of their skin, not by the content of their character, like every human person should be. They are not able to obtain positions in the political field, even if they are able to perform the skills required to do so. Black Africans can not live in a place desirable to them even if they can afford it nor can they linger in a white neighborhood after six o'clock. Even children and teenagers in Detroit are allowed to stay out until eleven o'clock! A grown person should not be denied the privilege of running his or her own life. These people can not voice their opinion on this though, for fear of being banned or jailed. Steve Biko spoke out against the South African government and was banned and beaten. Donald Woods wrote about the reprehensible way that Steve was banned and killed. To be banned means taking away your human rights to associate with other human beings. You could only have one "foreign" person in the same room with you unless the persons were in your immediate family. Just imagine a Christmas dinner at your house with everybody in the living room visiting with one another while you, being a banned person, stay in your room. Even with all the odds against them, Steve Biko and Donald Woods were determined to beat the forces who were to blame. Many peoples' houses were run over by bulldozers, their possessions set ablaze and many family and friends were killed.

My personal viewpoint on "Cry Freedom" is as follows: I do not think it is very fair of Mr. Donald J. Woods to escape from facing his government. Steve Biko was put on trial, fair by no means, but still there was a trial. Everybody else, especially if you are of black skin or origin, would have to answer to the white racist government of South Africa. Even though Mr. Woods did not want Steve's death to be in vain, the fact remains, Bantu Steven Biko is dead and Caucasian Donald James Woods is still very much alive.

Even though the government of South Africa is currently making a change for the better, they still have a long way to go. Yes, it is very nice of them to let Nelson Mandela out of prison after all this time, but he really shouldn't have been there in the first place. Until Black people, as a whole, come together and show the white man that we ARE equal, we will never totally be treated as the smart, intelligent human beings we are.

Damia Williams
(Student's name)

Indian Crisis (from Arbrie Griffin's class)

I learned that the Indians rely on the land and many things were taken from them by white men. I learned Indians believe in having as many wives as they like. The Indians had to fight with the white man because they wanted the land the Indians lived on. In some ways it seems as if they were treated like slaves. I learned that when someone hits an Indian, it is a disgrace. I heard about Indians' customs that we don't even know about. I would like to know why do Indians like to smoke all of the time. Why were they smoking all of the time in the movie "Little Big Man"? I learned that the Indians always refer to the world in terms of the sun or the earth or the great spirit above.

Ragina Hadley
(Student's name)

Indian Crisis (from Arbrie Griffin's class)

Well, at first, the Indians had all the land they wanted. Then the white man wanted some of the Indians' land so the white man keep making deals with the Indians even though they had no intentions of keeping to their deals. The Indians got fed-up with it and started fighting back for their land. But it seemed like it was a losing battle because the white man had more fighting men, more weapons, and better conditions all around. Because the Indians were a proud sort of race, they weren't willing to be pushed around. But, Indians kept losing battle after battle, until they began getting weapons, and sort of evening up the odds; but, by then, it was too late and up until this day, the Indians have become really scarce.

A. Guff

(Student's name)

Crisis of American Indians (from Arbrie Griffin's class)

The Indians, where did the name come from? What does it mean? To me, it probably means free as an eagle or stolen away (like their land was stolen away).

The Indians were savagely taken from their home land, like a piece of trash. The Indians tried to fight so hard to stay on the land, but they were killed like animals. Burning their homes, killing their loved ones, all for what? A land! A land that was not ours, but now it is. These people were friendly people just trying to stay alive on the land. That once fertile field now has roads and buildings. A land that once had clean air, now has dense pollution. A land that once you could roam freely, now is crowded.

Now the Indians are gone. I know that they believe in the four elements of life – Moon, Sun, Water, and the Sky. They loved nature. They believed if they could be a part of an animal, that could help them hunt or fight.

Bobby Rybicki

(Student's name)

Indian Crisis (from Arbie Griffin's class)

I feel as if they were treated very wrongly, because they were kicked off their own land by the white man. The white man could have been decent and maybe worked together in building a new America. It made no sense treating Indians that way. White men were greedy, rude and selfish. All the white men wanted was new land and money. They talk about how the Indians are poor and drunk; well, I feel they made them that way because they didn't know any other way to handle the problem. They ruined Indian life, putting them on a tiny piece of land and expecting them to live on it while the white man took over the rest. What on earth could they have been thinking about? I'm quite sure they wouldn't have wanted the Indians to do the same to them. Why haven't things changed?

Joshua Clark
(Student's name)

Section V

USING WRITING TO LEARN TO IMPROVE ADMINISTRATION AND SUPPORT TEACHING

**Austin Sanders, Ruddiman High School
Rick Seefelt, Murphy Middle School
Norman Grange, Kettering High School
Gerri Conway, Mumford High School**

SUMMARY OF ADMINISTRATIVE BENEFITS WITH WRITING TO LEARN

Why should administrators implement and support writing to learn in the Detroit Public Schools? A first reason originates from convincing numbers: A thirty-year body of research and practice tells us that writing to learn is a practical, productive teaching strategy. Its purpose is students' personal engagement through writing with subject matter in all disciplines.

A second reason for implementation is recognition that writing to learn fits neatly into existing school effectiveness plans. It is a way to achieve the goals of higher student achievement, demonstrate performance at grade level, and support school-wide effort toward district-wide learning objectives. Writing provides concrete evidence of students' efforts.

A third reason for implementation is that writing to learn provides teachers with a much-needed how-to for implementation of M.E.A.P. writing objectives. It provides opportunities for all types of writing that will be measured by the M.E.A.P. test. We need to encourage much more practice in writing than we presently do. Practice with writing about content means it is more likely that the work collected over time in students' writing portfolios will be of increasingly acceptable quality.

A fourth reason for implementation is practical: writing to learn is not a complicated program that requires adoption of a lot of new materials; it requires a minimum of in-house staff development and requires no difference in scheduling, monitoring, or observation. It requires no special expenditure

beyond basic writing supplies. It does require genuine administrative acceptance. Students must learn to expect to write in every content area.

In sum, writing to learn offers the greatest possible benefit to students, staff, and the schools for the smallest possible investment of dollars. Can we afford not to implement it?

**PARALLEL USES OF WRITING TO LEARN (WTL):
Content Learning and English Departments' Involvement
in Writing Improvement**

Norman Grange

- Goals:**
1. In content classes, WTL helps identify and remediate students' difficulties with subject matter.
 2. In English classes, WTL helps achieve more fluent, correct English composition.
- Objectives:**
1. In content classes, students write a short paper identifying a topic of study and detailing what they do and do not understand about it. The teacher collects the papers and uses them to enrich class discussion.
 2. In English classes, the writing process is used to revise papers to publication readiness for collections of students' papers.
- Materials:**
- In all classes, writing materials are made available to students.
- Procedures:**
1. In content areas, reading of papers, and reevaluation of students' learning.
 2. In English, revision, proofreading, and publication.
- Evaluation:**
1. In content areas, monitoring of mastery of identified areas of difficulties.
 2. In English, letter grades appear only on revised papers.

WRITING TO LEARN STUDENT HELPER

(developed by Norman Grange)

Student's name: _____

English class: _____ Hour: _____

English teacher: _____

Content area class: _____ Hour: _____

On the lines below, write what topic your class is now studying, what you do understand about it, and what difficulties you are having with it.

**A Report from an Administrator about
Working "Smarter" using Writing to Learn
by Rick Seefelt, Murphy Middle School**

Quite often I have heard the advice, "Work smarter, not harder." It is good advice because each day I encounter a concept, a situation, a behavior that I have not met before. As a school administrator, I have a steady stream of daily responsibilities, things to do, problems to solve, and information to learn. No matter how well I plan my day, students with behavior problems and disciplinary referrals from staff take a huge amount of my daytime working hours. Writing-to-learn (WTL) concepts have helped me to work smarter in this demanding and important work.

Using writing to learn, I have become a facilitator who helps students, often with the help of parents/guardians, to help themselves, and to successfully comply with expectations for appropriate behavior. When I work with students for disciplinary reasons, I have them write a statement in which they answer the questions: **WHY WERE YOU SENT TO THE OFFICE?** and **WHAT HAPPENED?** Through writing, a student is afforded an opportunity to present his/her side of the story and to present any factors that I might choose to consider before taking any administrative action.

If students have been involved in a "fight", for example, they now "fight" to give the best written account of what occurred, especially in terms of what the other person has said or done. The students first write basic information: telephone number, birth date, parent/guardian name, etc. This saves me time. I don't have to probe with questions to find out what happened, who was involved, record details, stop an argument, or even tell students to be quiet. Sometimes students say they are too emotionally upset or reluctant to write a personal account. But, with some encouragement, I get a student writing and look over his/her shoulder, and make comments such as "He did" or "That was a tough situation to be in." soon, they are writing. The students' writing provides me with a demonstrable exhibit of academic ability, provides catharsis for students, presents contrasts of their perceptions or opinions, gives each student an appropriate mechanism for telling his/her side of the story, and gives me a concrete idea of what happened and why it

happened. Most importantly, writing forces students to become reflective; they begin to analyze their own behavior. Student writing gets both me and the student to the core of the problem, and this is of primary importance to arrive at a fair resolution of the problem and behavioral change.

Student writing helps tremendously when communicating with parents/guardians, and in our working together for change in student behavior. A parent/guardian immediately knows that the student was consulted before action was taken. The actual words that were written by the student can be read to or by the adult. This is invaluable; the adult knows what the child said and what the other child(ren) said. This strategy often can provide a basis for getting an assurance that deviant behavior will not recur because I often have the student write a response to "Why shouldn't I be suspended?" or "Why should I be allowed to return to school?" When the student writes such a statement, I ask parents/guardians to "proof" it and to make any adaptations that they feel are necessary. Then I have them sign it, too. This gives the conference a formality and sets a clear standard for expected, acceptable behavior. Sometimes the parent is given the option of discussing the agreement at home, and returning the student to me and school when he/she thinks that the child is ready to return and to conform to acceptable standards of behavior. In this way, the parent/guardian and student take ownership of the remedial action while I merely facilitate and assure them that their own remedy conforms to school policy. What's more, this procedure effectively gets results with less student-regression/student-code-violation than immediate suspension and administrator-centered conferencing.

As I said before, I'm a facilitator. As a result of implementing writing-to-learn strategies, I have been able to work more effectively with students who need to be counselled, especially regarding behavior problems. Students expect to write more, talk less, and give me an accurate account of what they see as being the purpose/reason for their conference with me. Quite often, a student's perspective differs from that of the teacher, or from other students' points-of-view. Recognizing this difference has saved me much time in getting to the root of problems. Especially when I'm working with a group of students, writing gives each the opportunity to present his/her version. My oral reading to students of these statements gives me and the students the

opportunity to hear contrasts, sort out extraneous facts, and get a true picture of what each participant's perception of the problem is. Once the picture is clarified, a solution or proposal for changing future behavior is easier to perceive or to work toward. This WTL strategy continues, and I will formally propose WTL strategies to other Area C administrators next school year when we meet.

All my staff can use WTL strategies to enhance the learning experience of their/our students. Much of what is being done is now effective. I can propose that staff use WTL in weekly lesson plans. Once teachers utilize strategies, they will see their value. Then, I'll assist them in exchanging workable procedures and sharing them with their coworkers. It's a natural.

MURPHY MIDDLE SCHOOL

7

DATE _____

STUDENT STATEMENT

NAME _____ GRADE _____ SECTION _____
HOMEROOM _____

CLASS SENT FROM _____ TEACHER SENDING _____

1. WHY WERE YOU SENT TO THE OFFICE: _____

2. WRITE WHAT HAPPENED: _____

3. PARENT/GUARDIAN: _____

ADDRESS: _____ ZIP: _____

PHONE : _____ DATE OF BIRTH: _____

EMERGENCY PHONE: _____

**Planning/Implementing a Writing to Learn
(WTL) Program in School
Austin J. Sanders, Ruddiman Middle School**

As an administrator:

- 1) Assess the knowledge of current staff about present knowledge of WTL.**
- 2) Plan appropriate strategies to broaden their knowledge base about WTL.**
- 3a) Planning includes using those teachers who have competence and interest in WTL.**
- 3b) Based on the outcome of #1, decide on the developing scope and dissemination of a WTL program over time.**
- 4) Determine the necessary logistics and available time for staff development.**
- 5) Develop some actual lessons.**
- 6) Provide training and encourage implementation.**
- 7) Monitor**
- 8) Adjust**
- 9) Evaluate**
- 10) Record**
- 11) Replan**

What I might be able to do:

- 1) Pilot a WTL at Ruddiman**
- 2) Collect and analyze data**
- 3) Report on findings**
- 4) Provide faculty support; report to parents; offer workshops**
- 5) Act as the facilitator (not the director) for all of the above.**

"Thus, the purpose of providing training on any practice is not simply to generate the external visible teaching 'moves' that bring practice to bear in the instructional setting, but to generate the cognition that involves the practice to be selected and used appropriately and interrogatively."

**"Synthesis....Staff Development...." pp. 85
(see bibliography for complete reference)**

Proposed Model Timeline
Austin Sanders, Ruddiman Middle School

A Working Timetable for Writing to Learn (WTL) for the Administrator:

September

1. MEAP analyses strategies for MEAP scores
2. CAT analyses Strategies for improvement of CAT scores through WTL.
3. Development of strategy based on assessment.
4. Acquisition of materials needed for implementation.
5. Develop a syllabus/timeline with faculty
6. Presentation of plan to whole staff.
7. Plan for some ongoing and final evaluation.

October

Possible Re-Organization

1. At least two weeks of active involvement with WTL prior to MEAP
2. During MEAP, an evaluation of what the students have done.
3. Plan solutions to obvious problems.
4. Develop a school-wide plan for posting samples of students' writing in classrooms.

November

1. Continue with writing activities
2. Analyze results - compare with others not involved in small meetings.

December

1. First evaluation
 2. Review progress
 3. Re-plan
- CHRISTMAS BREAK**

January

1. Present results of first evaluation to staff.
 2. Plan for activities to include Black History Month
- FINAL EXAMS**

February

Black History Month

1. Incorporate Black History idea.
 2. Publish papers of students.
- WINTER BREAK**

March

1. Workshop - How to use CAT to help in writing to learn.

April

CAT

1. Evaluation

May

1. Final Evaluation
2. Present results of evaluation to staff.
3. Recommendations

11

SAMPLE
RUDDIMAN MIDDLE SCHOOL
STUDENT REFERRAL FORM
FROM TEACHER
by Austin Sanders

Date _____

Hour/Room _____

Student's Name _____ Grade/H.R. _____

Teacher's Name _____ Unit Head _____

REASON FOR REFERRAL. Describe student's behavior in this particular incident:

Previous attempts by the teacher to alter behavior of student:

ADMINISTRATOR'S ACTION:

Referred to Counselor _____
Phone Call to Home _____
Kept Out of Class _____
Entered in Anecdotal Record _____

Adm/Teacher Conference _____
Adm/Coun/Student Conference _____
Student Sent Home _____

Administrator

Counselor

**RUDDIMAN MIDDLE SCHOOL
STUDENT SELF-EVALUATION SHEET**

Name _____ Homeroom _____ Date _____

Sent to the office by _____ Hour _____ Time _____

(Fill out all the information on this sheet. Use back of page if necessary.)

Why were you sent to the office?

What is the problem as you see it?

What do you think you should do about the problem?

What do you think the counselor should do about your problem?

Parent's Name _____

Address _____

Telephone Number _____

**Sample Student Responses
to Ruddiman
Self-Evaluation Form**

Response #1:

Dear Mr. Sanders,

I was reading a book and I was telling my friends to look at the posters and a magazine. I was just sitting there, then I looked up and saw you. I stopped talking to my friends and reading the magazine and looked at the teacher. You should suspend me because I was talking while Ms. Spence was talking to us and I was reading while she was giving us our work and you should suspend me because I was disrupting my friends from learning. The reason you should not suspend me is because I think I already got the punishment I needed. I'm going to not talk so you would not have to come back up here. Another reason is so you would not have to write or type up something more that I'm not going to do. What I can do in the future is to keep out of trouble, stop talking, listen to the teacher, and do all my work. I will look at my book and keep from doing bad things like ignoring teachers. I will tell my friends to stop talking to me or I'd stop talking to them or ask my teacher can I change my seat because of my talking. I want to start over because I skipped a few things about misbehaving in class and what I can do to change that. I wasn't doing that much talking because I heard what she said and I was going to do it. I did the rest of my work today. In the future I promise I will not talk and I promise I will not ask for or bring another book that I'm not working on into the classroom. (I forgot you could suspend me because I asked for a rap book instead of looking at the teacher.)

Response #2:

I realize that my behavior at Ruddiman has not been good. I further understand that my behavior is having a negative effect on my grades. My highest grade so far this year has been a "D". I have received several "E's" also.

I plan to improve my behavior and improve my grades by:

- (1) Completing and turning in all my class and homework assignments.**
- (2) Refusing to chew gum or eat candy in class.**
- (3) Following all instructions and directions given to me by my teachers.**
- (4) Refusing to get out of my seat without permission.**
- (5) Coming to school with the proper supplies and with the proper attitude towards school work.**
- (6) Watching my body language so that the messages I send out to others will be pleasant.**
- (7) Speaking to my teachers and peers in a way that shows respect.**
- (8) Refusing to use profane or disrespectful language anywhere at Ruddiman.**

I further agree to report to the teacher or other officials at school information about anything that might be in violation of the "Student Code of Conduct".

Signed,

Response #3:

Why I was misbehaving in class? What can I do to change?

I was misbehaving because people were talking to me and saying funny jokes and talking about people who were not doing anything. I will change by not calling people names, and I'll stop playing with my combination lock. Also I will not laugh and tell jokes about people who aren't doing anything.

3 reasons Mr. Sanders should suspend me:

First, I was talking and talking about people and, second, playing with my combination lock in class when, number three, it was supposed to be in my locker.

3 reasons Mr. Sanders should not suspend me:

First, I will not have my combination lock in class, and I won't laugh at jokes and I won't talk about people anymore. I intend to keep out of trouble in the future. I will listen to my teacher, and obey the rules and follow the instructions and do my work, and stop all the trouble I cause like throwing paper balls and telling jokes, and talking to people.

I will obey all rules.

.....

Response #4:

I came into class and she told us all to sit down and I did, too. Isiah called me a horse and I said you are a dog. Mrs. Mitchell said it takes one to know one. After that, Isiah kept barking and snapping his fingers at me like I was a dog and called me a dog. I walked out, and I came to the counselor's office. On my way out the door, Isiah called me a horse, too.

Section VI

STUDENT VOICES

"Detroit: My Home"

From Ellen Harcourt, Mackenzie High School, comes an assignment that combines students' reading experiences, discussion, and writing.

Classroom Assignment

We read Stanley Sanders' "I'll Never Escape the Ghetto" and discussed it during two class days. I asked all of the students to react and take notes during our discussions about the reading; then, I asked my students to write for ten minutes on the topic:

"Detroit: My Home"

All responses to my assignment were read aloud and discussed. I put them into the students' portfolios to be considered later as possible selections for a more finished paper, perhaps an essay or poem for our Writing Program Anthology.

P.S. I found all their writing to be very touching in their concerns and sensitivities. During the ten minute writing period or even during our preliminary discussions, NO ONE put his/her head down. Everyone participated fully.

#1. Although some day I may leave here, I can never really get out of Detroit. It is where I was born and where I've lived and where I have grown. Detroit is in my blood, and it will never escape me, maybe because I never want it to. As bad as it is here, I think Home is where you'll always feel safest. I believe it would be a much better city if everyone directed all of their negative energy into positive energy. I will always try to do my part.

#2. Detroit is my home in more ways than one. Here is where I awakened everyday and saw the sun. Here is where I've played, laughed and cried. Whatever went on, I knew I couldn't hide. Each day has been an adventure, but through the fun I've learn to mature. If ever I leave my mighty city, when I come back I'll never look on it with pity. If around the world I happen to travel, Detroit is the only place I'd call Home.

#3. I live in Detroit and will always have strong feelings about this city. Although it may not be the most beautiful and friendly city, I will probably live in Detroit later in life. I feel if some of the big corporations in the city donate more to the community, there could be a change. They could build more homes and reopen businesses. That would help to bring more people back into the city.

#4. When I think of Detroit, I think of all the young Black men dying. It's because of drugs and gang violence. I love Detroit. There's so much to do here, but I wouldn't want to live here all of my life because drugs and violent crime is a major issue in Detroit. Crime is a big issue because of crack.

#5. Detroit is My Home
Motown
Crack
Guns
Coleman Young
Violence in the Detroit Public School System
Was many times the murder capital
River Front
Dope Dealers
Bell Isle
Pistons
Greek Town
Hart Plaza
Cobo Hall
Joe Louis
Young African Americans Dying for Dollars

#6. I have no intentions of staying here, not because I don't like it here but I want better for my children and myself. I don't intend to have to live as an adult, like I did as a child. I am afraid for my family and myself.

I would never deny being from Detroit but I'm not sure I would volunteer the information either. I want to be where I can trust and be trusted. If I choose to stay, it will be because things have changed for the better.

#7. Detroit is my home. When I graduate from college, I will continue to live in Detroit. When I pursue my career, I will continue to live in Detroit. My kids are going to be raised in Detroit because Detroit is my home town. There has been a lot of crime throughout the Detroit area, but you can't run away from violence. My children would attend the best schools if I'm financially able, but I don't feel young people should have to go to private school to be away from public schools. I want my children to know where I grew up and what kinds of things we were faced with. Then, in that way, maybe they could spread the word and try to change things to make Detroit better, too.

- #8. Detroit is my home, I was born and raised in the city of Detroit. Detroit isn't the best place to live but it's not as bad as some other places. I think Detroit is a caring city although there are many drugs and crime problems. But if you stop to think, these problems are everywhere, not only Detroit. Our city is in a rough situation right now concerning money. Most people try to blame this all on the mayor; I feel he, and others are to blame. I think if we the people come together in love, Detroit will be back on it's feet in no time. Strictly speaking for myself, Detroit is my home and I love it.**

#9. Detroit is My Home

birthplace in 1972
my brother's birthplace
my Wisconsin home that I lived in for 16 years
my future life
my grandparents'/my parents' residence
shopping malls
my feelings
education (Elementary, Junior, High School)
my thoughts
friends
my children
my dogs (born here in Detroit)
my life years from now with my own family
my life experience
my college education
my hobbies
my relatives' deaths
my Puritan/Linwood home
my friends
my learning experience
my doll and toy years
my fears
my loving relationship with boys I trust
my joy
my sorrow
In general, Detroit is my life

#10. Detroit is the home I will never have. When I finish high school, I want to travel, just take some time to figure out my troubles. But before I travel, of course, I want to attend college here because there's nothing better than knowledge.

There's much more to Detroit than meets the eye; there are some good people and real nice places to go.

#11. I was born in Detroit.

I was born on Collingwood in Detroit.

I moved to 9225 Steel in Detroit.

I've seen my friends and family killed and buried in Detroit.

My brothers and sisters were born in Detroit.

My Black brothers as well as my sisters are trying to make my home as uncomfortable to live in as they each possibly can.

After I graduate, I'll do my best to leave Detroit.

Here's a place that I was born and I'm scared to walk out my front door.

Afraid I'll get killed by a stray bullet.

#12. When I think of Detroit, I think of the drug epidemic. It's sad to say but it's true. A poem that deals with drugs comes to mind because I lost a brother and my father to drugs here in Detroit. The name of my poem is Cocaine:

Beware my friends, my name is Cocaine - Coke for short. I entered this country without a passport and ever since then I have been haunted and sought after by junkies, pushers, and plain clothes Dick's--mostly by users who need a quick fix. I'm more valued than diamonds, more treasured than gold--use me just once and you too would be sold. I'll make a school boy forget his books. I'll make a beauty queen neglect her looks. I'll take a renowned speaker and make him a bore. I'll take your mamma and make her a whore. I'll make a school teacher forget how to teach. I'll make a preacher not even want to preach. All kinds of people have fallen under my wing; you don't believe me, just look

around to see the results of my sting. I have daughters turning on mothers; I have sisters rolling their brothers; I have burglars rolling the Lord's house; I have husbands pimping their spouse. The Queen of Crime and Prince of Destruction--I'll cause the organs of your body and your mind to malfunction.

#13. Detroit is my home. This is not one of the best places to live. Detroit has crime-infested neighborhoods; there are drug dealers and drug users roaming the streets. But most important, there are the young kids and the youths who have this place as a model.

The kids watch their parents become high and kids become confused because they feel as if they should do the same: like parent, like child. The youth aren't any better. They feel the only money to be made is on the streets. Selling their drugs to parents with kids who feel as if they should do the same.

Is it that important to have gold chains, beepers, and trucks? Is it that important to destroy the lives of all the children that are our future?

This is what I see in Detroit. Not including the debt that the city is in. Detroit is not a home; it's like a tar pit that you have to struggle to get out of and only a few survive.

#14. Detroit is my home because I lived in this city for seventeen years. I know almost every street and every short-cut in the city of Detroit. The majority of my family was born and have lived and still are living in this city. Detroit is my home because my friends and members of my family such as my two grandfathers and my grandmother were buried here when they died.

Section VII

Detroit Teachers' Plans and Concerns: Toward Dissemination of Writing to Learn throughout the Curriculum

**Barbra S. Morris, co-faculty member,
University of Michigan course: Theory, Practice and Implementation
of Writing Across the Curriculum Programs**

At the end of each University of Michigan course meeting (see Appendix for course syllabus), teachers would write for 20 minutes in their journals, perhaps responding to class discussion, or raising new issues suggested by the evening's exchange of ideas, or commenting on a new insight.

To begin this concluding section of our manual, quotes from teachers' journals highlight a range of significant observations about classroom practices and about schools as educational environments. Our understandings were informed and changed by our best efforts as individual teachers and colleagues together:

As we were talking and volunteering ideas during tonight's class, I could not help but notice the hands of people in the room--hands held high, hoping that they would be recognized--but for some it seemed a long time that they were waiting, afraid of being forgotten. What was happening in the minds of those who were waiting? I don't know, but I would not want to be a child in a room and be ignored for a long time. Sharing the dialogue is important to all of us.

Austin Sanders

Philosophy is fine, listening to others expound is enlightening, but the purest, cleanest message I received tonight was, if you fail the first time, try, try again.

Karin Brown

I think it's important for educators to connect with feelings or, perhaps, reawaken them in kids. Feelings become a gateway to the intellect, especially for children. That's why we need the academic freedom to determine how and even, at times, what we will teach. If the direct "feeling" connection is not made with our students, we can teach as creatively as we wish, but the learning we hope for will not take place.

Ellen Harcourt

The article from last week and part of this evening's discussion made me begin to think of the importance of television literacy, something I had never considered in the past. I've had students write reports on TV programs but we've never compared the different ways we each "read" TV shows and why.

Mary M. Evans

I have not talked about writing to learn across the curriculum at my school yet. I did discuss it with my department head, however. She says she is willing to help me think of ways to entice our staff to consider the merits of the program (If you think a presentation during lunch is workable, she says, there should be funds available for teachers' lunches).

Arbrie Griffin

Because of my trying new writing-to-learn tasks, my students are now paraphrasing and simplifying in their own words what they read as well as what they hear. Through these writing-to-learn methods, students seem to be grasping some of the concepts that once were difficult for them to comprehend. Also, by creating their own examples of certain scientific laws and concepts, students are being more creative and expressive.

Joyce Simpson

Exchanging ideas with other teachers in this class is incredibly beneficial. I have jotted down many ideas I would like to incorporate—but when I get back to work, some of the excitement has died. I could radically change my teaching approach, but I'm afraid. Switching boats altogether in the middle of the stream may daze me or drown my students. Yet, my success with what I have already tried with writing to learn definitely merits switching something—at least the paddle... On a personal note, I am living proof—writing my own ideas is becoming easier for me, too, every week.

Sharon Rouse

The class presentation for administrators tonight went well; I was proud and pleased with the enthusiasm of teachers. I was expecting more faces of administrators, but I am not discouraged. I am going to take what I have learned and go forward with it for the benefit of my students.

Helen Didley

In addition to these examples of journal observations, frequently teachers noted in discussion that writing is used in almost every classroom, but only, usually, as a means of testing or evaluation. However, testing situations don't promote students' enjoyment or ease with writing.

The ability to write fluently, thoughtfully, and easily results from regular, comfortable practice with writing in order to explore and reason through one's concerns relatively un-selfconsciously. For example, when reading is assigned, and accompanied by an assignment to write personal questions and observations about the reading, students begin to associate reading course content with active critical thinking about it. A habit of thoughtful inquiry is acquired as a reader's questions are written down.

Language tasks (reading, speaking, listening, "active" television/film viewing) can work to promote students' development in analytic reasoning when writing becomes a tool for learning more and more about a subject.

Teachers also wondered:

How could the ideas they had learned about in this course they had taken together be disseminated throughout their schools?

Arbrie Griffin, for example, put it this way: "As a graduate of the course, I should be given opportunities to bear witness to what I have been doing in class." After the course ended, Arbrie and Kwasi Machupa did develop and lead a Faculty Writing-to-Learn Workshop for Finney High School teachers, drawing upon one of their four course-scheduled site visits (offered between January and June 1990 by Morris and McKenna) to bring Ele McKenna from the University of Michigan as an additional invited speaker.

The final University of Michigan course meetings resulted in teachers' devising and designing plans for dissemination, taking their best educational classroom practices in writing to learn to others. Possibilities for dissemination, listed below, were suggested by the Detroit teachers:

- 1) Establish small groups of teachers (3 or 4 per group) to work together promoting writing to learn, disseminating material to their colleagues, serving as resource people, and engaging in conversations with others about the value of the innovation. Help each other modify strategies to fit into ongoing lesson planning.

For example, students can become more active in thinking through writing about their daily classes:

I. Students

- a. write objectives for the day's lesson;
- b. write about (or define) at least one course-related concept each day;

- c. write lesson-related commentary during the final five minutes of class (questions, speculations, observations, etc.);
- d. in pairs write their ideas about what an assignment is meant to teach them. This collaborative writing leads to a discussion of the best process to follow in order to achieve the assignments' objectives;
- e. write assignments that all students in class might do;
- f. write for and produce a cross-curricular publication;
- g. keep journals and logs documenting their work in classes and homework;
- h. plan and monitor a semester's enrichment activities in the class (bring in relevant articles, suggest speakers, engage in peer editing, etc.).

II. Teachers

- a. become recognized as experts in their own departments and schools and set up in-service events for their colleagues about writing;
- b. make use of students' informal, ungraded writing in evaluation to demonstrate long-range values of writing to learn across the curriculum;
- c. set aside regular writing time during the week for requiring an interesting variety of kinds of students' writing about course concepts in class;
- d. encourage students' writing by referring to it positively during lectures, answering students' written questions, developing a file of examples of good student responses, illustrating benefits of writing by using models of students' effective writing in class discussion and with assignments;
- e. develop models of good student writing for use in classes and to share with teachers and parents.

III. Administrators

- a. work with teachers to develop in-service on-site presentations about writing in teacher's own classes;

- b. mount school-wide writing efforts (write in every class on Fridays, read students' writing) post announcements of writing contests, have a weekly "award" for student writing to learn;
- c. arrange for outside speakers to talk to classes about writing in their fields, set up evaluation that rewards frequent use of writing to learn in classes;
- d. open up possibilities for team-teaching that promises to increase writing;
- e. bring in teachers from other Detroit schools to talk together with your own faculty about using writing for learning;
- f. tailor small groups during in-service to fit disciplines so that teachers in the same field can explore possibilities for using writing to learn;
- g. offer to visit classes and read students' writing from that class aloud and comment on its values;
- h. form and support a school Writing-to-Learn Committee that conducts a needs assessment and collects and distributes information from faculty about what will help them promote the initiative;
- i. help teachers to write grants for workshops and seminars;
- j. establish a writing workshop under supervision of teachers and run by students who give peer advice to other student writers;
- k. ensure that there is genuine follow-up and strong encouragement for teachers who are introducing new classroom writing activities;
- l. urge central administration to develop and support teams of Detroit teachers who become informal teacher-school consultants to each other's schools, visiting, presenting, and planning together.

In The Sense of Learning, Berthoff reminds us that all of us had to learn how to write but we are all born composers. With our students, she observes, we can

... "encourage the discovery of mind by assuring that language is seen not as a set of slots, not as an inert code to be mastered by drill, but as a means of naming the world,

of holding the images by whose means we human beings recognize the forms of our experience, of reflecting on those images, as we do on other words. We teachers will assure that language is continually exercised to name and establish likes and differences so that by sorting and gathering, students will learn to abstract in the discursive mode; they will learn to generalize. They will thus be able to "think abstractly" because they will be learning how meanings make further meanings possible, how form finds further form. And we will, in our pedagogy of knowing, be giving our students back their language so that they can reclaim it as an instrument for controlling their becoming."

Appendix

- A. Course Description
- B. Course: Panel Program 3/15/90
- C. Course Evaluation Report
- D. A Partnership in Education
- E. Bibliography

Project: Leadership in Writing Across the Curriculum
-Detroit Public Schools/University of Michigan Collaboration-

Dr. Barbra S. Morris
Dr. Ele McKenna

University of Michigan Course (3 credits): Theory, Practice, and
Implementation of Writing Across the Curriculum Programs.
Winter Term 1990
Time: 4:30--7:30 Location: Given below

Syllabus

- Week 1 Introduction of Course and Participants
Jan.18 Models of Writing Across the Curriculum Programs
(Rackham-Library) Distribution of books, journals, course packs, materials.
- Week 2 Comparisons from each School Site:
Jan.25 Logistics and Needs
(A/D Aud.)
- Week 3 Issues in Writing Across the Curriculum
Feb. 1 Attitudes of Faculty in the Disciplines
(Rackham Student Attitudes
-Cooley) Using Writing to Learn Course Concepts
- Week 4 Relationship between Critical Thinking and Writing
Feb. 8
(SCB Mezz.)
- Week 5 Writing to Learn: Model Design
Feb.15
(Rackham
-Cooley)
- Week 6 Writing to Learn: Model Design
Feb. 22 Implementing Writing to Learn Assignments
(Rackham- Describing Writing-to-Learn Pedagogy
Cooley)
- Week 7 Writing to Learn: Model Design
March 8 Implications for Faculty and Administration
(SCB Mezz.)

Week 8 Implementing a Writing Across the Curriculum Program
March 15 School Acceptance and Development
(Rackham-Cooley) Panel Discussion: Principals from Participating -
Schools (See attached schedule of presentations)

Week 9 Write In Conference 3:30-8:30
March 22 Wayne State University, Student Center Building

Week 10 Drafts of Writing Across the Curriculum Plans
March 29 Evaluation (Guest speaker: Paul Pirrich)
(SCB Mezz.)

Week 11 Presentation of Proposed Plans
April 5
(Rackham-Cooley.)

Week 12 Presentation of Proposed Plans
April 12
(SCB Mezz.)

Week 13 Workshop: Fine-Tuning the Plans
April 26
(Rackham-Cooley)

Note: School visitations account for six hours of class time.

University of Michigan Course (3 credits): Theory, Practice, and Implementation of Writing-Across-the-Curriculum Programs

Panel Program--3/15/90 (as proposed by teachers)

1. **Welcome to visiting panel members**
History of project, purpose of course, matching MEAP objectives with writing to learn
Barbra Morris (University of Michigan)

2. **Brief description of theory, practice, and evaluation**
Ele McKenna (University of Michigan)

3. **Group presentations--classroom practices across the curriculum**
 - Science**
 - Sharon Rouse (Mackenzie)**
 - Joyce Simpson (Kettering)**
 - Social Science**
 - Kwasi Machupa (Finney)**
 - Lillian Williamson (Mumford)**
 - Mary Evans (Kettering)**
 - English**
 - Karin Brown (Ruddiman)**
 - Arbrie Griffin (Finney)**
 - Ellen Harcourt (Mackenzie)**
 - Math**
 - Tracy Carpenter (Mackenzie)**
 - Jean Ellis (Ruddiman)**
 - Kristine Murray (Mumford)**
 - English**
 - Helen Didley (Mackenzie)**
 - Beverley Moseley (Western)**
 - Anne Platt (Mumford)**
 - Administrators**
 - Geraldine Conoway (Mumford)**
 - Norman Grange (Kettering)**
 - Sadie Robinson (Mackenzie)**
 - Austin Sanders (Ruddiman)**
 - Rick Seefelt (Murphy)**

4. **Response to presentations--Panel Discussion**

Evaluation Report
for
Theory, Practice and Implementation of the
Writing-Across-the-Curriculum Course
Detroit Public Schools/The University of Michigan

Instructors: B. Morris and E. McKenna

Evaluation Report Prepared by Paul R. Pintrich, Ph.D.
School of Education
The University of Michigan
Ann Arbor, Michigan
June 8, 1990

Summary of Course Evaluation Design

The course offered by B. Morris and E. McKenna on Theory, Practice and Implementation of Writing-Across-the-Curriculum for the Detroit Public Schools was given in the 1989-1990 school year to teachers in Detroit. At the end of the course, on April 26, 1990, the teachers filled out a course evaluation form designed by the two instructors. (See Appendix 1 for a copy of the course evaluation form.) There were 15 teachers that returned their course evaluation form. This report summarizes those 15 teachers' responses to the questionnaire.

The questionnaire included both rating scale items (on a five-point scale) as well as open-ended questions. Appendix 1 has all the summary statistics and frequency counts for the rating scale items. These statistics are displayed right on a copy of the actual questionnaire next to the appropriate question (see Appendix 1). This makes for easy access to the rating data for any one question. The open-ended responses are summarized by question in Appendix 2. This summary in Appendix 2 lists all the responses of all the teachers to the open-ended questions "in their own words", no editing of the teachers responses were done. When more than one teacher responded in the same way, the remark is not repeated, instead a number in parentheses is listed at the end of the response that signifies how many teachers made the same remark. For example, on page 1 of Appendix 2, for the second question on what techniques they have used in their class this semester, 4 teachers said they found "having students write then share their ideas with each other" or peer editing was the technique they found most useful.

There were six sections on the course evaluation questionnaire (I-Preliminary Information, II-Course Content, III-Course Instructors, IV-The Writing-to-Learn Manual, V-Site Visits, and VI-Future Plans, see Appendix 1). The remainder of the report summarizes the data from these six sections. Given the nature of the questionnaire, there is more emphasis on "formative" evaluation data or how to improve future courses in the

teachers' responses than "summative" evaluation data on the actual impact it had on the teachers.

Results for Section I-Preliminary Information

Most of the respondents (60%) had not attended a writing course or workshop previously, although all respondents would now recommend this course to faculty at their school (see Appendix 1, page 1). In addition, the remarks the teachers made about why they would recommend the course to others (see Appendix 2, page 2) reflect the importance of writing and the use of writing as a tool to teach thinking. Given that this was one of the goals of the course, most of the teachers seemed to endorse it in their remarks, one measure of the success of the course.

Another measure of success is that most of the respondents attended most of the sessions, although 6.7% attended less than 5 and some teachers were not present when the course evaluations were filled out. In addition, a third of the teachers said they would attend the course even if it did not give credit (Appendix 1-page 2). In contrast, 60% would not attend if tuition was not provided for the credits. All the teachers also felt the time required was appropriate for the credit.

Results for Section II-Evaluation of Course Content

The ratings of the course content and course activities are displayed on pages 2, 3 and 4 in Appendix 1. The ratings were very high for the course in general, most averaging 4 on a 5 point scale. Lecture presentations and class discussions were rated the most highly (means of 4.5), while the peer writing groups (mean rating=3.7) and the writing conference attendance (mean=3.1) were rated the lowest of the activities. Open-ended comments about the course seemed to reflect the importance of class discussion, the usefulness of the materials, and the practicality and usefulness of the methods for teaching (Appendix 2-page 3). The teachers also wanted more demonstrations and presentations on how to actually implement the activities (Appendix 2-page 4). Suggestions for changes mainly concerned logistical arrangements (time of year, weekly meeting times, rooms and

physical aspects, parking, etc.) to substantive concerns about having fewer site visits, less open discussion, and more discussion with other teachers (Appendix 2-page 3). The teachers also wanted less journal writing and fewer readings (Appendix 2-page 5).

There were a series of questions about how this course influenced the teachers and their students (Appendix 1-pages 3-4). In general, almost all the teachers (73.3%) felt that this course had a direct influence on changing their teaching behavior (Question 5-Appendix 1-page 3). In addition, all the teachers felt more confident in their ability to use writing to learn activities in their own classroom and most (80-90%) felt they could play a leadership role in helping other teachers implement writing activities. In their open-ended comments, all the teachers mentioned that they now saw writing as an important tool for learning and teaching and that they had new ways of using writing assignments in their classes. They commented: they tend to use it more often and how writing "smashes passivity" and can be useful with even the slowest students (Appendix 2-page 4). Clearly, the course was successful in changing these teachers perceptions of writing and their own ability to use writing and help other use writing in their classrooms.

Results for Section III-Course Instructors

The comments on the two instructors were overwhelmingly positive (Appendix 1-page 5 and Appendix 2-page 6). The respondents felt they were always well-prepared, were knowledgeable, used class time well, and were open to questions and discussions. They liked the idea of team teaching and felt it made the class more interesting. Obviously, the instructors were very well-received by the teachers and were greatly responsible for its success.

Results for Section IV-The Writing-to-Learn Manual

Again, the ratings for the utility of the Writing-to-Learn Manual were quite high, a third of the teachers felt it was a useful activity overall and would be useful for others, but 86.7% felt that the preparation of the writing activities to go into the manual was the most useful and that they would help on the course in the future. The preparation of an

implementation plan was seen as useful by only 46.7% of the respondents, the one aspect of the manual rated the lowest (Appendix 1-pages 5-6).

Results for Section V-Site Visits

The site visits were seen as very effective by 40% of the teachers (Appendix 1-page 6), but in their open-ended comments the teachers were divided over what activities were best for a site visit (Appendix 2-page 7). Some of the teachers wanted large scale workshops for many of the faculty in their buildings, others wanted departmental meetings that could focus on writing activities for specific disciplines, and others wanted small, personal interactions with the site visitors and the building staff. Of course, the teachers wanted support from the administrators and saw the site visits as one way to build support at the building administrative level. As the project moves to its building-by-building implementation phase, it seems clear that the nature of the project and the site visits will vary by building. The site visits will have to reflect this diversity and the two instructors will have to be flexible in their response and the activities they plan for the future site visits.

In addition, it is clear from the ratings and the open-ended responses that the teachers do not feel that all the faculty at their building are going to be responsive to the idea of writing-across-the-curriculum. They think that some like the idea, but don't think it is effective or that it will be too time-consuming ("who's going to read all those papers") and feel that all the faculty at their building have questions and concerns about the idea. This is the one area where the teachers seem the least confident in their ability to implement the program. They seem to feel very confident in their own classroom and even in leading a workshop (see comments above from Section II), but they are not sure they can really make changes in their colleagues' behavior. They will need support as they attempt to implement their own building program. The site visits will play an important role as a means to support the teachers as they develop their building programs.

Results for Section VI-Future Plans

The comments for future plans are many and varied (see Appendix 2-pages 8-9). The teachers seem to be motivated to go back to their buildings and work on developing a program, but these programs will vary. Some teachers plan to work closely with other teachers on a voluntary basis, while others are planning to try to get most of the building faculty involved. Many of the teachers see the involvement and support of the building administrators as crucial and will work on obtaining and maintaining their support. In contrast to this "top-down" model, other teachers are trying more "grass-roots" or "bottom-up" approaches that involve getting other faculty involved in the program through informal discussion and meetings. In addition, the teachers see the importance of demonstrating the effectiveness of the program to all building staff and plan to publish students' writing and display students' writing in the building as two mechanisms for showing effectiveness.

Overall Summary

The course was perceived by the 15 teachers as a very positive experience. They felt they got useful, practical, and interesting materials and methods that they can use in their own classrooms for writing. In addition, they feel they have the materials/methods as well as the self-confidence and motivation to begin to implement a writing-across-the-curriculum program in their own buildings next year. They realize it is a big and difficult task to change teacher behavior towards writing at the departmental and building levels, but they seem ready and willing to take on the task. The course and the two instructors (B. Morris and E. McKenna) seem directly responsible for the provision of the materials/methods and also for heightening the teachers' motivation. As the program moves to its building level implementation phase, there will be bigger challenges to confront, but the two instructors and these 15 teachers seem to be prepared and motivated for the next phase. Accordingly, given that these were the general goals of the course this year, it seems safe to conclude that the course was very successful.

APPENDIX I

Date of evaluation: April 26, 1990

Title of Course: Theory, Practice and Implementation of Writing-Across-the-Curriculum

Faculty: Morris/McKenna

Your Name: _____

Your Discipline _____

I. Preliminary Information

Have you ever attended any other courses or workshops on the subject of using writing in your teaching?

| | | |
|----------|---|-----|
| <u>9</u> | (1) No | 60% |
| <u>6</u> | (2) Yes. If yes, please describe briefly below. | 40% |

See Appendix 2 page 1 for summary.

Whether you were a participant or an auditor, approximately how many of the classes did you attend?

| | | |
|-----------|-----------------|-------|
| <u>0</u> | (1) Less than 3 | |
| <u>1</u> | (2) 3 or 4 | 6.7% |
| <u>14</u> | (3) 5, or more | 93.3% |

If you tried techniques or ideas drawn from the course in your teaching this semester, please state techniques you found most useful:

See Appendix 2 page 1 for summary.

Would you recommend this course to other faculty members in your school?

| | | |
|-----------|------------------------|------|
| <u>15</u> | (1) Yes (explain) | 100% |
| <u>0</u> | (2) No | |
| <u>0</u> | (3) Not sure (explain) | |

See Appendix 2 page 2 for summary.

Would you have participated in this course if it did not give credit?

| | | |
|-----------|------------------------|-------|
| <u>10</u> | (1) Yes | 66.7% |
| <u>2</u> | (2) No | 13.3% |
| <u>3</u> | (3) Not sure (explain) | 20.0% |

See Appendix 2 page 2 for summary.

If it did not provide tuition? $\frac{6}{40\%}$ Yes $\frac{9}{60\%}$ No

How do you feel about the time required for graduate course requirements?
(One night @ 3 hours per week)

| | | |
|-----------|-----------------------------|------|
| <u>15</u> | (1) Appropriate | 100% |
| <u>0</u> | (2) Inappropriate (explain) | |

II. Course Content

1. Please indicate (circle) your rating of the overall value of the course.

| | | | | | | | |
|------------|---|---|-------|-------|-------|----------|-----------|
| Not at all | 1 | 2 | 3 | 4 | 5 | Very | M = 4.6 |
| valuable | | | 2 | 2 | 11 | valuable | STD = .74 |
| | | | 13.3% | 13.3% | 73.3% | | |

2. Please indicate your rating of the overall value of the course materials.

| | | | | | | |
|--|---|---|-------|-------|-------|-----------|
| | 1 | 2 | 3 | 4 | 5 | M = 4.5 |
| | | | 2 | 4 | 9 | STD = .74 |
| | | | 13.3% | 26.7% | 60.0% | |

3. Please indicate your rating of the overall value of course activities.

| | | | | | | |
|--|---|---|------|-------|-------|-----------|
| | 1 | 2 | 3 | 4 | 5 | M = 4.4 |
| | | | 1 | 7 | 7 | STD = .63 |
| | | | 6.7% | 46.7% | 46.7% | |

4. Please indicate your rating of the value of the following activities:

(a) Journal Writing

| | | | | | | |
|--|---|------|-------|-------|-------|-----------|
| | 1 | 2 | 3 | 4 | 5 | M = 4.1 |
| | | 1 | 2 | 7 | 5 | STD = .88 |
| | | 6.7% | 13.3% | 46.7% | 33.3% | |

(b) Lecture Presentations

| | | | | | | |
|--|---|---|---|-------|-------|-----------|
| | 1 | 2 | 3 | 4 | 5 | M = 4.5 |
| | | | | 8 | 7 | STD = .52 |
| | | | | 53.3% | 46.7% | |

(c) Presentation to Administrators

| | | | | | | |
|--|---|------|-------|-------|-------|------------|
| | 1 | 2 | 3 | 4 | 5 | M = 3.9 |
| | | 1 | 6 | 2 | 6 | STD = 1.06 |
| | | 6.7% | 40.0% | 13.3% | 40.0% | |

(d) Class Discussion

| | | | | |
|---|---|------|-------|-------|
| | | 6.7% | 33.3% | 60.0% |
| 1 | 2 | 3 | 4 | 5 |
| | | 1 | 5 | 9 |

M = 4.5
STD = .64

(e) Guest Visits (Evaluation lecture, interview demonstration)

| | | | | |
|---|---|---|---|---|
| 1 | 2 | 3 | 4 | 5 |
| | | 4 | 8 | 3 |

M = 3.9
STD = .70

(f) Peer Writing Groups

| | | |
|-------|-------|-------|
| 26.7% | 53.3% | 20.0% |
|-------|-------|-------|

M = 3.7
STD = .96

(g) Writing Conference Attendance

| | | | | |
|-------|-------|-------|-------|-------|
| 1 | 2 | 3 | 4 | 5 |
| | 6.7% | 40.6% | 26.7% | 26.7% |
| 13.3% | 26.7% | 20.0% | 6.7% | 26.7% |
| 1 | 2 | 3 | 4 | 5 |
| 2 | 4 | 3 | 1 | 4 |

M = 3.1
STD = 1.49

What aspects of the course did you find most useful?

See Appendix 2 page 3 for summary.

What changes in the course would you suggest?

See Appendix 2 page 3 for summary.

5. **Have changes in your thinking about using writing in your classes come about because of this course? (Please discuss)** 11 Yes 2 No
73.3% 13.3%

See Appendix 2 page 4 for summary.

6. **What would you have liked more of?**

See Appendix 2 page 4 for summary.

7. **What would you have liked less of?**

See Appendix 2 page 5 for summary.

8. Do you think students in your classes (throughout this course) have benefited from writing-to-learn activities you have introduced?

| | | |
|-----------|-------|---|
| <u>11</u> | 73.3% | Yes (explain briefly what happened in a case or two) |
| <u>1</u> | 6.7% | No |
| <u>2</u> | 13.3% | Sometimes |

See Appendix 2 page 5 for summary.

9. From the experience of this course, do you feel confident in your ability to continue writing to learn activities in your own classes?

| | | |
|-----------|------|------------|
| <u>15</u> | 100% | Yes |
| <u>0</u> | | No |

10. Do you feel you could help to lead a discussion about writing and learning for teachers in your discipline from your participation in this course?

| | | |
|-----------|------|------------|
| <u>15</u> | 100% | Yes |
| <u>0</u> | | No |

11. Do you feel you could help to lead a discussion for teachers in your school in disciplines other than your own from your participation in this course?

| | | |
|-----------|-------|------------|
| <u>13</u> | 86.7% | Yes |
| <u>2</u> | 13.3% | No |

12. Do you feel you could help to lead a discussion for teachers in other schools from your participation in this course?

| | | |
|-----------|-------|------------|
| <u>14</u> | 93.3% | Yes |
| <u>1</u> | 6.7% | No |

13. How successful was this course in integrating uses of writing activities with your subject matter?

| | | | | | | | |
|------------|---|---|-------|-------|-------|----------|-----------|
| Not at all | 1 | 2 | 3 | 4 | 5 | Very | M = 4.5 |
| valuable | | | 2 | 3 | 10 | valuable | STD = .74 |
| | | | 13.3% | 20.0% | 56.7% | | |

III. Course Instructors

| | Disagree Strongly | | | | | Agree Strongly | | |
|--|-------------------|---|---|--|-------|----------------|-------|-----------|
| 1. The instructors were always well-prepared. | | | | | 13.3% | | 86.7% | M = 4.9 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = .35 |
| | | | | | 2 | 13 | | |
| 2. They were knowledgeable about the subject of writing and learning across the disciplines. | | | | | 20% | | 80% | M = 4.8 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = .41 |
| | | | | | 3 | 12 | | |
| 3. They used class time well. | | | | | 33.3% | | 66.7% | M = 4.7 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = .49 |
| | | | | | 5 | 10 | | |
| 4. They encouraged discussion. | | | | | | | 100% | M = 5.0 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = 0 |
| | | | | | | 15 | | |
| 5. They responded well to questions. | | | | | 20.0% | | 80.0% | M = 4.8 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = .41 |
| | | | | | 3 | 12 | | |
| 6. Additional Comments: | | | | | | | | |

See Appendix 2 page 6 for summary.

IV. The Writing-to-Learn Manual

| | Not at all valuable | | | | | Very valuable | | | |
|---|---------------------|---|---|--|-------|---------------|-------|-----------|---------|
| 1. Please indicate your rating of the overall value of producing a writing-to-learn manual in this course. | | | | | 6.7% | | 26.7% | 66.7% | M = 4.6 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = .63 | |
| | | | | | 1 | 4 | 10 | | |
| 2. Please indicate your rating of the value of producing descriptions of writing-to-learn classroom practices for other teachers in the manual. | | | | | | | | | M = 4.9 |
| | 1 | 2 | 3 | | 4 | 5 | | STD = .35 | |
| | | | | | 2 | 13 | | | |
| | | | | | 13.3% | | 86.7% | | |

3. Please indicate your rating of the value of producing a "plan" for implementing a writing-to-learn program in your school.

| | | | | | | |
|---|---|---|-------|-------|-------|-----------|
| | | | 20.0% | 33.3% | 46.7% | M = 4.3 |
| 1 | 2 | 3 | 3 | 4 | 5 | STD = .80 |
| | | | 3 | 5 | 7 | |

4. Please indicate your rating of the value of this manual for others in school in Detroit.

| | | | | | | |
|---|---|---|------|-------|-------|-----------|
| | | | 6.7% | 26.7% | 66.7% | M = 4.6 |
| 1 | 2 | 3 | 1 | 4 | 5 | STD = .63 |
| | | | 1 | 4 | 10 | |

5. Would you consider helping with (or participating in) this course in the future?

| | | | |
|-----------|----------------------------|-------|-----------|
| <u>13</u> | (1) Yes | 86.7% | M = 1.3 |
| <u>0</u> | (2) No | | STD = .70 |
| <u>2</u> | (3) Maybe (please explain) | 13.3% | |

See Appendix 2 page 6 for summary.

6. Additional comments about the manual and our own future involvement with dissemination.

See Appendix 2 page 6 for summary.

V. Site Visits (By the end of this course, only one of the four possible visits has occurred.)

Please indicate your rating of the overall importance of site visits.

| | | | | | | | |
|----------------------|---|---|-----|-----|-----|----------------|-----------|
| Not at all effective | 1 | 2 | 3 | 4 | 5 | Very effective | M = 4.2 |
| | | | 3 | 6 | 6 | | STD = .78 |
| | | | 20% | 40% | 40% | | |

What activities on site do you believe will be the most useful?

See Appendix 2 page 7 for summary.

At this point, do you think the idea of writing to learn will be interesting to teachers in your school? (Circle one)

| | | | |
|--------------|--------------|--------------|-------------|
| Most of Them | Many of Them | Some of Them | Few of Them |
| 1 | 5 | 9 | |
| 6.7% | 33.3% | 60.0% | |

At this point, have you already talked with teachers in your school about writing to learn: 86.7% 13 Yes 2 No 13.3%
If yes, what is the response? (Describe)

See Appendix 2 page 7 for summary.

VI. Future Plans

What would you like to see happen in your school in the area of writing to learn across disciplines in the year (or more) ahead? Please describe.

See Appendix 2 page 8-9 for summary.

APPENDIX II

Appendix II

Summary of Response of Open-Ended Questions on Course Evaluation Questionnaires

Title of Course: Theory, Practice and Implementation of Writing-
Across-the-Curriculum

I. Preliminary Information

Have you ever attended any other courses or workshops on the subject of using writing in your teaching?

- Writing conferences, Writing Across the Curriculum Project with Mackenzie/U of M teachers
- Renaissance Writing Project
- a workshop sponsored by the Carnegie Foundation at Cooley High School
- the High School Minority Journalism Workshop at the U of M
- Basic writing courses as a grad (and undergrad)
- Bay Area Writing Project
- Proficiency writing

If you tried techniques or ideas drawn from the course in your teaching this semester, please state techniques you found most useful:

- writing "how to" passages
- spelling numbers
- journal entries
- the biopoems, letters
- having students write and then share their ideas with each other, peer editing (4)
- using writing to generate discussion, to check understanding, to share content of literature
- learning logs, exit slips, writing about an experience similar to the work being studied, admit slips wherein student tell what they don't understand about a selection
- writing to learn strategy
- asking students to solve problems with words
- summary writings with discussion
- having students write to present perceptions and opinions without being forced to use "proper grammatical precepts"

- using writing to assess pre and post knowledge of topics in class

Would you recommend this course to other faculty members in your school? (1) Yes (explain)

- helps clear up many misconceptions about writing as a tool instead of writing as a subject
- would encourage other teacher to learn strategies that would be helpful across the curriculum (to use writing to learn)
- because the teachers have a solid theory, a variety of strategies, and reasonable means of evaluation
- is valuable in giving a new approach to subject matter; also is a tool to increase learning and to find out what students need to learn
- offers the most simple and effective methods for enhancing learning
- discussed the idea of having students engage in writing with math teachers as a means of focus and evaluation of understanding of subject matter
- All educators, regardless of their field of expertise, should require students to express themselves, and explain their academic answers in writing.
- with more resource materials in math
- is dynamic course to promote writing in all disciplines
- is useful for successful achievement for students with different levels and abilities
- This technique gets the students more involved.
- Writing clarifies and develops thought. It doesn't have to be formal finished product oriented.
- There should be more resources for social studies.

Would you have participated in this course if it did not give credit?

(3) Not sure (explain)

- would say yes after I took the course, but not before
- would rather have received credit as opposed to auditing
- would participate without credit if it had been given as a 2-5 day workshop

II. Course Content

What aspects of the course did you find most useful?

- the ideas expressed and shared techniques from the co-participants
- the handouts, books, and materials
- class lectures and written materials
- plain talk
- the practical, immediately usable methods
- class discussion
- the guest visit
- the exchange of ideas
- met once per week
- attempts at modeling
- results of teachers' efforts to implement aspects of the program in their present classes
- direct application to work situation
- emphasis on thought enhancement vs. formality

What changes in the course would you suggest?

- have it earlier in the school year
- more guest speakers
- responses of administrators, design for production of manual
- a few site visits
- discussion with the middle and high school teachers
- cheaper parking facilities and cooler meeting rooms
- less reading outside of class
- have class in one room
- less open discussion
- periodic updates, reunions to share ideas
- the interview demonstration
- three school visits rather than four

Have changes in your thinking about using writing in your classes come about because of this course? (Please discuss)

- have a very definite plan for using some writing techniques in next year's classes
- became more intense in using writing to learn in my classes
- found an extremely valuable tool that was ignored and proved to be effective even for the slowest students in class (favorite phrase heard in class: It smashes passivity.)
- changed view about the product-orientation and visual-linear mode of design
- decided to reinstate journals and to use more effective ways to integrate writing into teaching
- discovered new ways to use writing, new way to evaluate writing
- found more research support for writing assignments with a more positive outlook for success
- understood value for writing in math as well as English/journalism
- using more writing, but it is less structured
- view writing as clarifier of ideas as well as means to communicate ideas
- can more easily explain the value of writing as a learning tool that can be utilized in all classrooms

What would you have liked more of?

- would like to see writing to learn in action in the classroom (demonstrated by other teachers)
- more discussion of readings
- specific direction in group work (instruments to be developed)
- presentations from teachers in situations similar to Detroit
- more small group sessions discussing reasons surrounding student failures rather than the few success stories
- visual aids
- more hands on material for curriculums outside of English
- the lecture on evaluation was good, but more time needs to be spent on assessing the success of the program
- supporting research
- more guest visits, bringing various area of expertise
- Dr. Morris
- football tickets!

What would you have liked less of?

- less general "hitching" (possibly no English teachers--they have a different agenda)
- venting
- less time in selling the model, i.e. the session which compared the amount of writing time used by various teachers
- the meeting with administrators
- the individual journal writings and readings
- people who seemed to think the concept of writing across the curriculum was ill-conceived and a thinly disguised way of making teachers' work more difficult
- less journals
- reading assignments

Do you think students in your classes (throughout this course) have benefited from writing-to-learn activities you have introduced?

Yes (explain briefly what happened in a case or two)

- spelling numbers improved
- controlled communication between each other
- had to read, think, and analyze more intensely
- more voluntary participation by students who never involved in class before when students read and interpreted things in writing
- more engagement in reading literature
- provided information on how to help them with difficulties
- reading a biographical sketch and/or passage and tell what you learned from your reading
- writing a journal entry during the last five minutes of class
- thinking before writing
- became reflective of their behavior and formulated strategies for self-improvement
- writing more freely and comfortably
- realized that writing is a skill that crosses all curricula and subjects

III. Course Instructors

Additional Comments:

- Team teaching was a good idea and it made the class more interesting.
- They cooperated well with each other, dividing tasks. No disagreement between them ever surfaced.
- A dynamic duo!
- Not enough materials were given in disciplines other than English. It would have been nice to have someone with a math background provide ideas in this area.
- very knowledgeable, helpful, and patient in imparting information
- not new information, but gained new meaning through their expertise

IV. The Writing-to-Learn Manual

Would you consider helping with (or participating in) this course in the future?

- I would do it for credit.
- If I were able to implement more writing in my own class and still show how all other responsibilities of teaching could be met.
- If time and date were changed to Saturday.

Additional comments about the manual and our own future involvement with dissemination.

- We as teachers can suggest what to do, but we are powerless to see it implemented.
- Some follow-up sessions would be useful.
- This has to begin somewhere and I enjoy those in this class who have been able to implement the ideas. Once the manual is put out and the material is presented, I will find myself using more of the ideas.
- Very warm, knowledgeable, friendly.
- I am willing to assist in disseminating this information in schools other than my own.

V. Site Visits

What activities on site do you believe will be the most useful?

- talking to interested teachers about writing to learn
- familiarizing administration with the goals and techniques of writing across the curriculum
- inspiring faculty
- workshops
- departmental meetings in which specific activities could be suggested for each discipline
- an inservice workshop with entire staff
- activities that involve the faculty in "hands-on" projects
- small group instruction where teachers can interact
- building of interpersonal relations at the staff level
- down-to-earth, directly applicable, use-tomorrow information/strategies for instructional staff
- meeting with administrators to convince them of the value of this curriculum
- activities for every discipline which can be used in class

At this point, have you already talked with teachers in your school about writing to learn? If yes, what is the response?

(Describe)

- Most of them have problems with the idea, i.e. "Who's going to read all of those papers?", "Students need to write grammatically correct, not just anything on their minds."
- Some of teachers are willing to be exposed to new strategies and techniques.
- They want more information about the class.
- Some show interest, but do not realize the efficacy of the program.
- Some like the idea, but they don't think they can find time to implement it.
- Most of them are enthusiastic about the program
- Some people are receptive, some are not.
- There is a concern about not correcting grammar.
- many questions and concerns
- positive, curious, favorable, and interested

VI. Future Plans

What would you like to see happen in your school in the area of writing to learn across disciplines in the year (or more) ahead? Please describe.

- Teachers who show an interest can introduce this concept to other reluctant teachers. In addition, departmental plans are needed in order for teachers to use the techniques.
- It would be helpful to see teachers interested enough to try writing to see whether it was proven to be effective for their students. It would be nice to see the Writing to Learn combined or interspersed with the MHS/UM Writing Program as a means of expanding on what we already have in our program. Strategies and techniques learned in the Writing to Learn class will help students learn new concepts and ideas in addition to development of writing skills. This class also helped to improve enthusiasm and motivation.
- All teachers should make a minimum effort to get students to write on a continuous basis regardless of results.
- a grand enlightenment, a realization of this as the path to true engagement with and transfer of knowledge
- each teacher in each discipline require students to write 1-3 times a week
- examples of students' writings displayed prominently throughout the school
- a final publication of students writing
- one or more person(s) acting as writing coordinator, who would help teachers infuse writing into their instructions
- an administration that stresses the importance of writing
- a grass-roots movement
- meeting with other teachers to discuss ways in which they are or can be using writing
- projects that cause students' work to overlap with other classes
- WTL across disciplines implemented in my school next year
- 100% staff participation would be difficult, but gradually the entire staff will incorporate.
- some voluntary inservice practice and a follow-up
- need to get teachers to be confident in their ability to learn
- demonstration of the worth of WTL program to the entire school next year
- utilization of WAC strategies by all staff to enhance the learning of students

- more collaboration and cooperation between teachers in similar and different disciplines
- transfer of knowledge and student confidence
- workshop with hands on materials

A Partnership in Education

Something special is happening between Mackenzie High School in Detroit and the University of Michigan, and it is happening because of a long-time partnership between the two institutions. Recent evidence of the value of a sustained alliance among teachers to improve communication across schools was a field trip by Mackenzie seniors to the U-M campus; they sat in on Residential College first-year seminars, talked with U-M faculty and students, and began to speak of the campus atmosphere as friendly and familiar. They felt welcome, and maybe most important, they felt that the U-M is accessible to them. In a post-visit survey, they reported that they now work harder and have started to visualize themselves as college students largely because of a joint educational effort between Mackenzie High School and the U-M.

The idea for the Mackenzie High School/U-M project originated in 1984, when Elizabeth Hood, then principal of Mackenzie, believed that if students could develop the motivation to excel and could improve their communication skills, they would also improve their chances of gaining admission to the U-M. Hood was reacting to disappointments in the previous year, when eight Mackenzie students had applied to enter Michigan and none had been accepted. She proposed a collaborative program in writing and critical thinking to close the gap between her students in Detroit and other applicants who were being admitted.

Barbra S. Morris, a lecturer at the U-M's Residential College and English Composition Board (ECB), helped create a working academic relationship between the U-M and Mackenzie. A Detroit Public Schools/U-M Collaborative Committee, composed of representatives from the U-M and Detroit Public Schools, approved the original proposal, and the U-M's Offices for Minority Affairs and Academic Affairs

agreed to provide a writing consultant to Mackenzie and to share costs with the Detroit Public Schools to provide special academic incentives for students: an anthology of students' writing, special meetings with parents, field trips to the University, and a team of Mackenzie teachers who emphasize academic writing. By the fall of 1985, the program was underway.

The dual purposes of the collaboration are to encourage inner-city Detroit students to view higher education as an attainable goal and to improve their academic abilities. The twin aims of motivation and achievement are crucial to creating university-bound students; therefore, the Mackenzie High School/University of Michigan Writing Program has focused on developing students' skills in oral and written communication in an atmosphere emphasizing steady academic achievement. Guidelines for the program include provision of a U-M writing consultant to meet bimonthly with the Mackenzie teachers to plan and further activities of the program and keep teachers informed about current studies in the teaching of composition.

The original 1985-86 writing program was limited to ninth graders. Middle school teachers and eighth-grade counselors selected the initial group, using writing samples, students' desire to participate, and teacher recommendations as criteria. Approximately 60 students constituted the first core group; they shared all their freshman classes, thereby creating a strong identification with the writing program and with each other.

Since the early years, the program has grown. Now 80 ninth graders share their daily schedules, including writing classes, and Mackenzie has gradually added tenth-, eleventh-, and twelfth-grade classes to the program. At this point, four teachers staff the eight writing classes that span the full four years.

Last semester, Tracy White, an MHS/U-M writing program teacher of English and drama, assigned readings from Charles Dickens' *A Tale of Two Cities*, but before her students read the novel, they were asked to do research on the French Revolution. By gathering background material, White notes, students gained a better understanding of the context for the novel as they learned college-bound research methods. Once students had read the work and written essays, they worked in groups for peer editing and critiquing. They exchanged constructive criticism and learned to gain a critical reader's distance from their own work. White finds that as students become accustomed to revising each other's work, they become more eager to edit and re-edit their own writing, often using computers supplied by the Detroit Public Schools. In a later unit, White's two classes moved into a speech segment of the course, during which they researched a current event, planned and videotaped a presentation, and formed a panel to present and discuss the outcome of their efforts. The research and writing assignments are designed to draw on students' own interests even as they prepare them for college-level work.

At the same time, the writing program makes a special effort to "demystify" the college experience and increase students' interest in higher education. Because many students are the first generation in their families to consider attending college, a carefully enhanced curriculum encourages them to realize that they are both capable of and expected to do college work. Morris, the on-site consultant from the U-M, comments, "Mackenzie is determined to help students see themselves as active, college-bound learners."

Field trips to the U-M campus have helped dispel students' misconceptions about college life and, according to their essays, enabled them to visualize



Photo by Bob Kalinbeck

As part of a collaborative project between the U-M and Detroit's Mackenzie High School, Mackenzie students visited the Ann Arbor campus.

themselves in a college atmosphere. In May 1989, for example, ninth, tenth, and eleventh graders traveled to Ann Arbor to tour museums and the law library, eat at a campus dormitory, and take notes while attending a college lecture. Helen Didley, the program's on-site coordinator, says that such field trips give her students a sense of the particular freedoms of college life and, at the same time, allow them to see that college students are not unlike themselves. "They see that a college education is achievable. Now it's not, 'If I go to college,' but, 'I *am* going to college,'" observes Didley. "As a result of the program, students become more focused and confident academically and socially."

As part of the writing program's evaluation, a Motivated Strategies for Learning Questionnaire (MSLQ) was designed by Prof. Paul Pintrich of the U-M's School of Education to evaluate students' motivation levels and attitudes toward academic learning skills. Those participating in the writing program showed significant gains on both the motivation scale and in measures of applied learning strategies over a year of testing. Although Morris recognizes that any test results must be viewed with caution, she is encouraged by this evidence and believes that University-sponsored writing classes have been instrumental in changing students' attitudes.

The students' success is good news to the U-M, as well. The writing program is one avenue towards fulfillment of an important commitment of the University to Michigan constituents. "The U-M recognizes its responsibility to the state," Morris says. "People look for leadership in education from the University of Michigan, as a flagship school, and all of us in the program are wholeheartedly involved in this timely work." Additionally, interaction with Mackenzie, "speaks to the philosophical mission of the Michigan Mandate," she says, referring to the U-M's commitment to build a pluralistic, multicultural campus community. Outreach programs enable the U-M to better understand the needs and experiences of inner-city youths and, consequently, to use this knowledge to increase minority enrollment, retention rate, and graduation rate.

The planning continues. Building on the success of the previous five years, faculty from the U-M's English Composition Board (ECB) and Residential College (RC) met with Mackenzie teachers for four "Planning Dialogues," sponsored by the Office of the Vice Provost for Minority Affairs and the Office of Academic Affairs. The meetings resulted in long-range plans for creative writing, math, drama, science, and social sciences projects. If these plans are funded, the Mackenzie/RC Educational Project will pair Mackenzie

students with RC students, who will receive college credit for field studies. Together they will conduct college-level research in community-based projects. Already, two steps toward implementing collaborative drama projects have taken place. Students from MHS came to the RC in spring 1989 to see *The Three Penny Opera*, and in April 1990, the Brecht Company, with the encouragement of the Residential College, performed Shakespeare's *Romeo and Juliet* in the Mackenzie High School Auditorium. Before the play was staged, a Student Leadership Team of eight MHS/U-M Writing Program students planned the event and enlisted their classmates to assist in set preparation, backstage work, press releases, invitations, and publicity. Director Robert Brown also held three workshops in dramatic interpretation at Mackenzie, helping to make *Romeo and Juliet* more accessible to students, who critiqued the play in their class studio and writing assignments.

The U-M/Mackenzie project is one of a number of outreach programs currently sponsored by the University. Its success is as important to the College as to Mackenzie High School students, says Dean Edie N. Goldenberg. "The College is proud of the efforts and accomplishments of this collaborative program," she says. "Making the U-M more accessible to a wider range of students will enhance the education of every LS&A student. It is in all of our interests to have our perspectives enlarged by students from varied economic, ethnic, and cultural backgrounds. This is ultimately as important as the study of ideas from different times and traditions."

—Ellen Gavin

Ellen Gavin was a CEW administrative intern for LSAmagazine.

Appendix E

A Bibliography for Writing to Learn in the Secondary School

Ele McKenna, University of Michigan

- Applebee, Arthur. *Writing in the Secondary School*. Urbana, Illinois: National Council of Teachers of English, 1981.
- Berthoff, Ann E. *The Sense of Learning*. Heinemann Educational Books, Inc., 1990.
- Beyer, Barry K. "Using Writing to Learn Social Studies." *The Social Studies*. (May/June 1982): 100--105.
- Britton, James. *Language and Learning*. New York: Penguin Books, 1972.
- Britton, James. *The Development of Writing Abilities*. London: MacMillan Company, 1975.
- Comley, Nancy et al. *Fields of Writing*. Shorter 3rd edition. New York: St. Martin's Press, 1990.
- Cooke Gary and John Stammer. "Grade Retention and Social Promotion Practices." *Childhood Education* (March/April 1985): 302--308.
- Cooper, Charles R. and Lee Odell. (Eds.) *Research on Composing*. Urbana, Illinois: National Council of Teachers of English, 1978.
- Emig, Janet. *The Composing Processes of Twelfth Graders*. Urbana, Illinois: National Council of Teachers of English, 1971.
- _____. *The Web of Meaning*. Upper Montclair, New Jersey: Boynton/Cook, 1983.
- Gardner, Howard and Thomas Hatch. "Multiple Intelligences Go to School: Educational Implications of the Theory of Multiple Intelligences." *Educational Researcher*. (November 1989): 4.-10.
- Geeslin, William E. "Using Writing about Mathematics as a Teaching Technique." *Mathematics Teacher*. (February 1977): 112-115.
- Gere, Anne Ruggles. (Ed.) *Roots in the Sawdust*. Urbana, Illinois: National Council of Teachers of English, 1985.

- Joyce, Bennett, and Robheiser-Bennett, "The Self-Educating Teacher: Empowering Teachers through Research." 1990 Yearbook of the Association for Superintendents and Curriculum Development.
- Kenney Donald J. and Linda Wilson. "Card Bards: Found Poetry in the Card Catalog." *English Journal*. (December 1982):63--65.
- Koeller, Shirley. "Expository Writing: A Vital Skill in Science." *Science and Children*. (September 1982): 12--15.
- Lehr, Fran. "Writing as Learning in the Content Areas." *English Journal*. (November 1980): 23--25.
- Macrorie, Ken. *Searching Writing*. Upper Montclair, New Jersey: Boynton/Cook, 1980.
- Martin, Nancy, et al. *Writing and Learning Across the Curriculum*. London: Ward Lock, 1976
- Mayher, John S., Nancy Lester, and Gordon Pradl. *Learning to Write--Writing to Learn*. Montclair, N.J.: Boynton/Cook, 1983.
- Miles, M., "Research Findings on the Stages of School Improvement." 1986 Conference on Planned Change. The Ontario Institute for Studies in Education.
- Moffet, James. *Active Voice: A Writing Program Across the Curriculum*. Upper Montclair, New Jersey: Boynton/Cook, 1984.
- Morris, Barbra S. (Ed.) *Disciplinary Perspectives on Thinking and Writing*. English Composition Board, The University of Michigan. 1989.
- _____. "Teaching Intellectual Method: The Integration of Critical Reading and Writing." *Toward Better Writing*. (Newsletter of the Writing Program at the Center for Academic Achievement, University of Northern Iowa. Vol.4, No.1, Winter 1988):1--4
- Newkirk, Thomas. *To Compose: Teaching Writing in the High School* Heinemann Educational Books, Inc., 1986.
- Petrosky, Anthony R. and David Bartholomae. (Eds.) *The Teaching of Writing*. Chicago, Illinois: University of Chicago Press, 1986.
- Piaget, Jean. *The Language and Thought of the Child*. trans. M. Gabain. London: Routledge and Kegan Paul, 1959.

Rico, Gabriele L. *Writing the Natural Way: Using Right-Brain Techniques to Release Your Expressive Powers*. Los Angeles: Tarcher, 1983.

Self, Judy. (Ed.) *Plain Talk about Learning and Writing Across the Curriculum*. Urbana, Illinois: National Council of Teachers of English, 1988.

Showers, Beverley, Bruce Joyce and Barrie Bennett. "Synthesis of Research on Staff Development: A Framework for Future Study and a State-of-the-Art Analysis." *Educational Leadership*. (November 1987): 77--87.

Stock, Patricia L. (Ed.) *Fforum: Essays on Theory and Practice in the Teaching of Writing*. Upper Montclair, New Jersey: Boynton/Cook, 1983.

Sullivan, Anne McCrary. "Liberating the Urge to Write: From Classroom Journals to Lifelong Writing." *English Journal*. (November 1989): 49--57.

Vygotsky, Lev S. *Thought and Language*. Gertrude Vakar (Ed.), trans. Eugenia Hanfmann. Cambridge, Mass.: MIT Press, 1962.

Walvoord, Barbara E. et al. "The Baltimore Area Consortium." *Programs that Work*. Toby Fulwiler and Art Young (Eds.) Upper Montclair, New Jersey: Boynton/Cook, 1990: 273--286.

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