leuslet .writing as a liberating activity. ISSUE TWENTY THREE Fall 1985 FINDLAY COLLEGE

THE PRICE OF SIMPLICITY:

Two Problems in Science Writing Instruction

Paul J. Beauvais Findlay College

Teaching is the art of simplification. Confronted by a world of staggering complexity, the teacher introduces simple methods of inquiry that students can use to render the world manageable. The writing teacher reduces the multi-faceted act of literary creation to a system of procedural directives called "the writing process." The science teacher reduces the complex task of scientific exploration to a system of procedural directives called "the scientific method." As a teacher of science writing, I pursue both of these enterprises; however, I am aware constantly of a dilemma posed by the need for simplification. Simplicity is possible only with a consequent loss of the creative liberty that characterizes both writing and science. To reduce either discipline to a simple method is to misrepresent the true nature of that discipline.

Two Views of the Writing Process

Perhaps the most common strategy for simplifying the writing process is to divide a writing task into discrete stages. Numerous stage models of the writing process exist; among the most familiar is the linear, three-step model advanced by Gordon Rohman in 1965. Rohman divides writing into stages of prewriting, writing, and rewriting. In the prewriting stage writers gather their ideas. They transfer these ideas to paper in the writing stage, then correct minor flaws in grammar and style in the rewriting stage. Seductively simple, the model remains popular twenty years after its introduction.

In sharp contrast to Rohman's stage model is the description of the writing process advanced by Linda Flower and John R. Hayes. Utilizing a procedure called protocol analysis, Flower and Hayes have studied the actual writing activities of college students. This research suggests that most students use a writing process far more complex than that recommended by Rohman.

<u>WLA NEWSLETTER</u> is published with support from the English Department of Findlay College and from the college's Fund for Innovative English Teaching. Copyright is retained by each author for the articles and poems in this issue. Flower and Hayes identify three activities common to most writers: planning or organizing an essay, translating the plan into writing, and evaluating what already has been written. What distinguishes these activities from the stages recommended by Rohman is that Flower and Hayes' activities are not arranged into linear steps; instead, they are embedded in each other at every level of writing. For example, while planning the organization of an essay, a well-formed sentence may occur to the writer. She then should shift her attention momentarily from planning to translating. The writer may be translating her plan into writing when a change in the plan comes to mind. She then should divert her attention back to planning. As Flower and Hayes note, "writing processes may be viewed as the writer's tool kit. In using the tools, the writer is not constrained to use them in a fixed order or in stages. And using any tool may create the need to use

Flower and Hayes' analogy is revealing in that it typifies the essential difference between the two models. Flower and Hayes identify the writer's tools but the writer must decide how and when to use those tools. Their model acknowledges the complexity of writing, but it offers little help in managing the multiple activities of the writing process. In contrast, Rohman provides the writer with step-by-step instructions that seem to simplify the writing process; however, his simple instructions may prove inappropriate for the writer's design. In attempting to make writing manageable, Rohman ignores the multitudinous options that the writer may pursue.

Rohman's model is a simple but reductive representation of the writing process. Flower and Hayes' model is a complex but accurate representation. Both models offer some assistance to the fledgling writer, but neither model is able to balance the conflicting demands of pedagogical simplicity and theoretical accuracy.

Misrepresenting Science

The beguiling simplicity of Rohman's writing model is rivaled by that of the familiar scientific method, which remains a touchstone of science education. Originating with Francis Bacon's dictum that science should proceed by collecting facts that then can be used to derive general principles, the scientific method is rooted firmly in a Seventeenth Century view of the scientific enterprise. In its contemporary form, the method divides scientific research into three discrete stages. It instructs aspiring scientists to make systematic observations, to formulate a hypothesis based on those observations, and to conduct experiments to verify the hypothesis. Easily teachable, the scientific method is an orderly program that students can follow. It also is a gross misrepresentation of the true nature of scientific research.

Foremost among the flaws in the scientific method is its suggestion that hypotheses are derived from systematic observations. In fact, scientists usually begin with a hypothesis that determines what they will observe. As Nobel laureate P. B. Medawar notes, "[the] expectation one starts with, [the] hypothesis one formulates, provides the initiative and incentive for the inquiry and governs its actual form. It is in light of this expectation that some observations are held relevant and others not" (43). The suggestion that observations give birth to hypotheses is an over-simplification of the real activities that scientists pursue.

If hypotheses are not derived from observations, how are they actually formed? Albert Einstein and Leopold Infeld suggest an answer with their assertion that "physical concepts are free creations of the human mind, and are not, however it may seem, determined by the external world" (31). Medawar is more direct; he states flatly that "hypotheses arise by guesswork" (43). These scientists agree that hypotheses must be tested rigorously and systematically to verify the accuracy of their predictions, but hypotheses themselves cannot be derived in any systematic manner.

POETRY WRITING FOR WRITING TEACHERS

Diane Kendig Findlay College

Looking at <u>The Sixth Grade Magazine</u> which I co-edited at age 12, I see nothing to indicate that of all the children in the class, I would be the one still writing poetry decades later. Like William Stafford, I believe the question is not, "When did I start writing poetry?," but, "When did all you other guys <u>stop</u>?" As an Ohio Writer-in-the-Schools, I see what "natural" poets children are. It is much easier to teach creative writing to sixth graders than to college creative writing students, so many of whom stopped so long ago.

What, then, would it be like to teach poetry-writing to high school teachers? I imagined the worst. When a colleague and I planned an intensive one-week course in "Publishing, Poetry, and Word Processing for High School Teachers," I planned prefaces to justify my poetry-writing assignments. My prefaces all ended with a plea that everyone "at least try."

I was pre-empted in the first ten minutes of class introductions when Jeanette, who I knew slightly (and found her creative, feisty, and fascinating), ended her introduction with, "And I'm sorry, but I don't 'do' poems. I'll try, but I just don't do poems."

Now I never ask people to "do" poems. As a matter of fact I always begin by asking them <u>not</u> to do a poem--and not that I am a practitioner of reverse psychology. I am trying to keep half of the writers from immediately casting half-baked inspirations into bronze. The other half--the perfectionists--I am trying to keep from the blank page that comes from waiting for bronze-worthy epics to pour fully-drafted onto the page.

I begin with an exercise designed to spring a unique association, memory, or idea, and ask each writer to get something down on paper about whatever I've sprung: a list, a paragraph of description, a fleeting image (as fleeting as "petals on a wet, black bough.") The first day of our summer class, for example, I read Grace Butcher's poem, "The Farm When I Was Five" as a model and led a guided imagery exercise, getting the class to relax, think back to a grade school classroom, and recall an incident there, imagining they could say something in that setting now that they could not say at the time.

Some people experienced strong, vivid memories; others recall less clearly. Whether clear or blurry, the poems were rewritten several times that week. The class read the poems aloud to each other, made suggestions, and revised some more. They went to "Word Processing" sessions, filled computer screens with words, and revised still more.

Meanwhile, I assigned new exercises. New drafts surfaced. Some of the drafts died natural deaths. Some lived and grew stronger and stronger. Some of the dead ones were resurrected. As everyone worked on and off at one or more poems, I began to see that everyone got something different out of the experience.

Janet, who claimed she had not written much poetry before, was most prodigious. She worked at digging deep into her memory bank, expressing things she had not expressed before. One very personal poem was about her father's deafness. Another poem was about an outright cruel teacher she had had as a child. On the last day of the course, she said to me, "All of these feelings and images have been in me all along, waiting to be expressed." (Her poem "Memories My Father Never Heard," and the rest of the poems referred to her are printed elsewhere in this issue.) For Tom, poetry writing was not so much a chance to express a strong emotion as it was a license to "fiddle with words." After he completed an intricate concrete poem entitled "Cello," he said, "I never realized you could just put anything down first, and then work with it." I liked the poem as an ode and as an expression of Tom's interest in stringed instruments. Meanwhile, he worked on an article about teaching entitled, "Suzuki English."

At least two teachers in the class had been writing for years--those types who had never stopped. Their poetry was marked by an ease and wit that I enjoyed immensely. (See "Contretemps" and "Retriever.") They seemed to appreciate the chance to have an audience, polish old poems, and produce new ones.

And then there were the converts. On the last day of class, unprompted, Jeanette announced she had written a poem that whe was going to read aloud. And then she read, not a silly quatrain or a nasty limerick, but a spare, clean lyric, "Slipping in Love."

It would be a nice transition to say that the teachers, have "slipped in love" with poetry-writing, went home and cranked out Pulitzer-prize volumes of verse. However, they did no such thing. Summer ended and they all went back to the classroom where most have been too busy to 'do' poems.

Still and all, I can say that for that week, and in whatever moments they manage to write poetry again, they all experienced a liberating activity. I happen to think it is the liberation that comes from putting our sixth grade power of creativity in touch with our adult range of experiences and emotions--an advantage sixth graders just do not have.

ABOUT WLA

WLA Newsletter began as a workshop on "Writing As A Liberating Activity" at the NCTE College Section's week-long summer conference in 1973. When the week was over, someone said, "It's too bad this has to end." That was the start of WLA. There have, since then, been two issues a year--Fall and Spring issues distributed at the NCTE and CCCC conventions. CELLO

Standing in the corner. poised and ready. Golden varnish shone these eighty years. Reminds me of all that has changed but you have not. You are the same as when you were created by anonymous hands. All is the same now as then. Only your players and strings have been changed all these years. One wonders where you have been, who has claimed you. who you have possessed. You have never really been owned, just shared your life with your players. And then outlived them. Whose spider-running fingers have smoothed your fingerboard now bled of black in places? Whose hands turned your ancient ebony pegs? Creaking-crackling, tuning to countless trained ears. Whose eyes have peered down on your golden top now cracked and chipped but still of beautiful sound? Some beauty gone, now. But you sound much sweeter than the day you were born. How many lives have you changed these past eighty years? And how will you change mine? With your unchanging power.

---Thomas Stuckert Pioneer Joint Vocational School

SOME POSITIVE ASPECTS OF JOURNAL WRITING

Lu Bruch Findlay College

When I asked my Freshman Composition class at Lima Correctional Institution to begin keeping a journal, one student said, "I can't. I eat everything I write down or that is written to me, so the guards won't read it." At first I thought he was kidding, but then I realized he was serious—in his present environment, he believed the written word so potentially dangerous that it had to be devoured. The class and I then talked over the specific advantages and/or disadvantages of keeping a journal in a prison setting: what limits the journals might have; who would read them; what benefits could be derived, etc. They decided that they wanted to try journal writing. Even the student who had for years literally eaten his own words volunteered to try this new endeavor.

This was an extreme case, certainly, and one not prevalent, I hope, in most writing classrooms. However, the profundity and basic pragmaticism of my student's statement did make me question once again the validity for journal writing among all my students, those on the main campus as well as those incarcerated thirty miles south. Out of that evaluation grew these claims for the assignment.

First of all, keeping a journal enables a student to question her own perceptions, biases, and beliefs. A journal can be the specified location for questioning day to day interchanges with others; it can be designated for questions about the readings that have been assigned; it can be the place for secret hopes, fears, and ambitions; or it can be used for reflections about any or all of these intellectual and emotional musings. A journal can be an incubator for the beginnings of creative expressions, ideas, or jottings - keeping them warm and protected before they are fully hatched. The scope of a journal is limited only by the interests and goals of the instructor assigning it and the student utilizing it. Therefore, perceptions of all kinds will find their way into such an activity. Whether these perceptions are of the journal writer or his associates, whether they are perceptions the writer had of literary characters and themes, or whether the perceptions involve parents and friends, all are grist for reflection and reconstruction through the process of writing about these experiences in a journal.

The act of writing itself focuses closer inspection on the experiences being explored, thus assuring the journal writer of some additional examination of the issues. As perceptions are reconstructed through writing, insight is often added, and new beliefs and convictions are created. From a philosophical point of view, journal writing at any age can dramatically increase the student's ability for critical thinking. As perceptions and ideas about the world are questioned in the journal, the student becomes more reflective and begins to test out her theories, new and old, empirically against the experiences of daily living. Beliefs are evaluated and kept, added to, discarded, or restructured "to fit" the individual's understanding at that moment, and expanded knowledge and truth are achieved.

A second major benefit of journal keeping is the access and availability it gives the student into the entire process of writing. This is true no matter what academic level the student may be on. Journal writing usually starts out as an intensely personal memoire, but with direction from the instructor, the entries can become less like pages from a diary and more reflective and analytical. I am frequently amazed, for example, how students move in one semester from entries like this one: "I liked the book very much though it was sometimes hard to follow," to: "This essay asked questions about what it meant to be a woman in today's society. I have asked myself those same questions but have never been able to come up with an answer. Now I know what was bothering me. It was..." This entry then continues to explore from the journal writer's viewpoint what she had not before been able to articulate about being a woman in 1985.

This articulation of both a question and eventually an answer is expedited by journal writing, I think. Many times a student will perceive a dilemma in what he is reading or experiencing in daily life that will find its way into his journals as a comment, question, or statement. Later, the student returns to that nagging, unresolved perception and tries to explicate his views more fully in writing. Very often, the student keeps at this perplexity until an answer has been attained in the journal. Clearly journal writing then becomes a way to explore objects, concepts, and relationships from every angle in order to augment understanding and wisdom. In fact, journal writing is an excellent way to present and let students work with formal heuristic procedures. Both methods can be utilized and sampled by directed journal assignments.

Another positive aspect of journal writing is the confidence the procedure inculcates in beginning writers. Most of the journals I have experimented with have been ungraded except as a total assignment. The students have the freedom to write as they please as long as they follow certain previously established guidelines. This prevents beginning writers from having to worry about complete sentences, paragraphing, or thesis statements; it frees them to concentrate on voice and a more profound analysis of the subjects of their own inquiries.

The connotation of "beginning writers" here may be misleading because I do not simply mean those with little ability to write effectively; I mean also those who do not know if they can write effectively because they have never before <u>tried</u> to. Both kinds of beginners are benefited by journal writing. Finding one's voice in writing can be a major breakthrough, and once a student realizes that she has something important to share with another person, that impetus is often all that is needed to spur her to explore other issues in writing until she is employing powerful writing can swell the confidence of the technically weaker writer by providing an audience and a place for writing to be attempted on a regular basis. The habit of writing itself, especially that which you know will be read and responded to, can often engender an interest in the process that leads not only to more confidence but also to stronger communication skills.

If journal writing can help students reflect upon, evaluate, and reconstruct concepts and beliefs and so promote greater understanding, it seems a procedure we should be incorporating in more of our writing classes. If, besides enhancing critical thinking, journal writing can also bolster confidence and initiate students into the life-long potentials of effective writing, there would seem to be no class in which this technique could not be well utilized. Many students, after all, having begun journal writing as an academic assignment, will continue the practice on a regular basis for the rest of their lives.

ABOUT THE AUTHORS

The articles in this issue are written by members of the Findlay College English Faculty and represent different dimensions of the department's writing program. PAUL BEAUVAIS is a linguist who teaches science writing for Pre-Veterinarian majors. DIANE KENDIG, a poet and translator of poetry, directs the department's creative writing emphasis. LU BRUCH, whose background includes philosophy and English education, teaches often at the college's campus at Lima Correctional Institution. TERESA LAROCCO, who has a backgrouund in reading, frequently teaches courses for adults in the Weekend College and other non-traditioal programs.

The poems in this issue of WLA are written by Ohio high school techers--THOMAS STUCKERT, MARGARET JEFFERS, AND JANIS HUNTER. They were all participants in the Seventh Summer Workshop for English Teachers at Findlay College, July 1985.

CASE APPROACHES FOR "REAL" WRITING

Teresa LaRocco Findlay College

Many disciplines use "real" situations or story problems all the time. Mathematics has its story problems, and speech and business courses use practical situations to involve the student in real-world assignments. Computer science uses simulated real world situations everytime a student is told to write a program that answers questions to a particular question; for example, one popular programming assignment has the programmer write a utility bill for a fictitious city based on information about water, electric, and sanitation costs. Until a year and a half ago, though, I had never heard much about "concrete writing assignments" in composition classes.

For ten years I had been cheerfully assigning papers of comparison/contrast, cause/effect, etc. that had no real audience except for me, and the students had no real reason or purpose to write the paper except for the fact that I told them to do it. Some students so trained will obediently write such papers well, and others will write poor papers grudgingly. Still others will refuse or fail to see the meaning in the assignment and not know what to do. The "concept" works somewhat better when students are given something to work with. For example if they are given an article and told to summarize it, at least they have something tangible to work with, but the reason for summarizing is still because the teacher told them to do so.

A year and a half ago, I realized that the "case" can make writing instruction more concrete. In case writing the students are given something tangible to work with and also given an audience albiet imaginary. The closer you get to real, the better the papers because students get involved. An example of this occurred once with a case called "The Proud Homeowner" (Field and Weiss). In this case the student is a homeowner who calls a man to regrout the bathroom tiles. The workman is cheerful and cooperative when he is in the home and tells the homeowner that he will gladly return if the homeowner is not satisfied. Several days later, the homeowner notices the grouting is coming out. He calls and gets a recording. He leaves a message and calls back several more times without results. The writing assignment tells the student (homeowner) to write a letter to the Trustworthy Traders Association. One of my students was so enraged by this case that he told me how he would have handled the situation instead. I was so impressed that a student would get so involved in an imaginary situation that I adjusted the assignment to enable him to give me a detailed report of the steps he would have followed.

Students often know that writing well is important but they don't know why. At the beginning of a sophomore writing course, I asked the students what they though they would be writing after they graduated. One education student replied "I won't be writing, all I'll be doing is grading papers." Others thought they would write in graduate school, but for the most part they all regarded writing as something they were required to do in college that had no real purpose.

I reacted by giving them a case in which a teacher had to write messages to parents and later where the same teacher had to write a year end report for the principal ("Messages on Report Cards," Field and Weiss). I followed that one with a case where a coach had to write a letter to the alumni praising the athletic program and then ask for their financial support ("Jocks Write Too," Field and Weiss).

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I can also get my point across by using personal examples. Most of my students must think I'm a real nut because whenever I give a case assignment that requires a letter to a company, I give them real situations where I have written such a letter. I can even show how such letter writing is personally rewarding.

I believe teachers should find ways to use real world writing in English classes. Some may argue that it is not academically oriented, but it is. You can find cases that ask students to compare and contrast ("Vladmire the Vampire," Field and Weiss), describe processes ("The Lincoln-Head Penny," Tedlock and Jarvie), work with cause and effect ("Too Much Financial Aid," Tedlock and Jarvie), or write narration ("Campus Tour," Field and Weiss). Some cases encourage research ("Yoga Club," Field and Weiss); still others give students things to edit and rewrite ("Student Helper," Field and Weiss.)

You may not always find one to fit your purpose but you can always write your own. I have a colleague, Lu Bruch, who introduces summary by asking students to pretend that they are editing a magazine that publishes summaries of articles. Their assignment is to read articles and summaries prepared by their staff and prepare some of their own as well. The assignment is open enough to let any article be summarized and still gives the sudents an audience.

Sometimes, as in that summary assignment, cases can be used to orient students to other assignments. And cases can be used at the start of the semester before going on to other types of assignments later. By doing this the instructor gets the student to think in practical terms and also to think that there are audiences besides the instructor.

Other benefits of concrete writing situations are more attention to detail and word choice. Real world situations are something a student can identify with and they give the student an audience. Consequently, a student will distinguish between the vocabulary that he would use with a president of a company, a parent of a fifth grader, a plumber or another student, because in real life a teacher would address the parents of his students differently than his own students.

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ARTICLES WELCOME

WLA welcomes brief articles that relate to the Key Editorial Concerns and grow out of practical experiences in writing classes. More-or-less regular WLA Departments: Teaching Tips --2-3 page outlines of a unit or an approach to a specific teaching task. Interconnections -- Examinations of approaches or materials of one level of writing class (e.g., college, high school, middle grade) from the perspective of a different level. Reading Lists --Recommendations, preferably annotated, of useful or stimulating reading. Student Perspectives.

KEY EDITORIAL CONCERNS OF WLA NEWSLETTER

*The fundamental compatibility of craft and creativity in good writing and in effective writing instruction.

*The role of writing classes in freeing student imagination and creativity.

*Ways that teachers can expand the range of instructional options open to them. * *

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WLA NEWSLETTER

Richard Gebhardt, Editor Findlay College Findlay, OH 45840

MEMORIES HER FATHER NEVER HEARD

Benched on silent sidelines Trapped, moist-eyed, in a deserted stadium Straining for unheard whispers of life. . .

His newborn girl's gurgly laugh
 "Da, Da"
Squeals of delight whirling on a carousel pony
 "Why are my eyes brown?"
The kindergarten open house tour
 "Was that the ice cream truck?"
A fourth grade flutophone recital
 "My fellow graduates. . ."
The church bells on her wedding afternoon
 "I love you, Daddy"
His granddaughter's muffled cry.

--Janis P. Hunter Fort Laramie Junior High

CONTRETEMPS

l am no poet Who stands slim-gaunted Gulping down vodka and life Begrimed by cigarette ash.

I slouch, Hemmed in by suburban concerns: my howe, the hearth, my plumpness, my promptness, my volunteer work.

My poems go unwritten, I do not choose, like Zelda, to lose my mind, nor like Sylvia, my life.

But yet, I stand at the wellspring of emotion --and, careful lest I chip a nail or run my stocking Still, I drown. ----Diane Klein

RETRIEVER

On this fourth of July with his family near our Lab lounges about like an off duty policeman. It is only when the fireworks start we see his stuff. He charges a shower of dazzling white light and plunges into the cornfield. Stalks snap. There are three loud pops and a boom. Up and down the rows he searches to bring us a present like the neighbor's dead chickens he droos at our door. But it is dark and falling light carries no scent. He trots back emoty jawed. The children laugh, but somehow I can't having been on a few wild chases and knowing how it feels to stand alone in the dark wanting so much to bring home something special.

--Margaret Jeffers Findlay High School

Bowling Green High School

Science Writing From Page 2

It is easy to see why a science teacher might be distressed by the above views on scientific research. If hypotheses are determined by guesswork, science students cannot rely upon simple procedures to produce useful generalizations. Students are left with no simple plan to confront the chaos of creativity that is the reality of scientific discovery. The idealized scientific method offers refuge from the complex reality, but it does so only by misrepresenting the true nature of scientific exploration.

Acknowledging the Dilemma

Neither writing nor science is a simple enterprise; each is a creative endeavor of great complexity. The task of the science writer is doubly difficult, because it requires mastery of two disciplines, neither of which can be simplified without distorting the actual abilities that the science writer must possess. Perhaps a teacher is justified in recommending simple methods that make mastery seem attainable to students; however, horesty requires the teacher to acknowledge that no list of simple directives can substitute for creativity and mental dexterity. These abilities are the science writer's most useful tools.

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Why Writing at Findlay College

At Findlay, you can use writing as a *major*, as a *specialty* within a general English major, as a strong *component* in a broad communications major, or as a *minor* taken to round out a major in another field. The various programs require different numbers and kinds of courses. But all writing programs usually involve courses in creative writing, advanced essay writing, journalism, technical writing, professional writing strategies, and independent project work.

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<u>WLA NEWSLETTER</u> Richard Gebhardt, Editor Findlay College Findlay, OH 45840

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