

MEASURING GROWTH IN COLLEGE WRITING

INTRODUCTION

The Learning Center, State University of New York at Buffalo, has a scheme for evaluating the writing program. The scheme encompasses student evaluation of courses, reports by each teacher on the progress of one student, the coordinator's evaluation of teachers, measurement of growth in writing samples, and examination of the students' writing anxiety. Since the entire scheme is rather lengthy, I will describe the measurement of writing and of writing anxiety in a one or two semester writing course.

PURPOSE AND PROCEDURE OF THE EVALUATION

In the writing classes students discussed the importance of audience, purpose, and persona to a piece of writing, completed writing tasks, wrote essays, combined sentences from the Strong workbook,¹ and did exercises in sentence structure, grammar and usage.

As the supervisor of six graduate teaching assistants of the writing courses, I wanted to see if our courses were having any effect on improving students' writing in terms of syntactic fluency and overall quality of the writing. In addition, I wanted to know if we as teachers were reducing students' anxiety about writing, believing that for many students their high anxiety about writing was partially responsible for their poor writing.

GETTING READY

I adapted Diederich's² and Cooper's³ schemes to measure growth in writing and used Daly and Miller's⁴ instrument to determine the writing anxiety level of students (see Appendix A).

Elizabeth Metzger is an Assistant Professor of English at Youngstown State University. At the time of writing this article, she was Coordinating Instructor of Writing at the Learning Center, State University of New York at Buffalo.

1. William Strong, *Sentence Combining* (New York: Random House, 1973), pp. 10-205.

Before the Spring 1977 semester began, several teachers and I met and compiled a list of ten writing tasks in the expository mode, a mode in which many students would be required to write in other college courses. The tasks provided students with a purpose, audience, and role. The directions for the task, along with sample tasks, follow:

University Learning Center
Writing Evaluation Plan

A. Rehearsal and Pre-writing

Choose a topic and begin thinking about it. Research it if you want, talk with others about it, make notes and jottings, make an outline, or do anything else that will be helpful to you when you write the essay.

Any notes you make to bring to class with you will be examined by the instructor. The instructor will also take up the notes along with the finished essay. Put your name on each page of any notes you submit.

B. Writing

The actual writing will be done in class on specifically identified paper given you by your instructor.

DIRECTIONS

1. Your instructor will provide you with a 3 by 5 index card and an identifying number. Print your name, date, class, and instructor *on your card*. Write the identifying number in the right-hand corner of your card and paper.
2. Write the *number* of your topic in the *left-hand* corner of your card.
3. Write on the topic you have rehearsed. You will have *only* fifty minutes to write the essay.
4. Write the final essay on *one* side of each sheet of paper.
5. Submit the final draft of your essay by the end of the period.

Explanatory Writing Tasks

1. In an attempt to improve her teaching technique, one of your professors this semester has made a somewhat surprising request of her class. She has asked you to recall past school experiences and, after some thought,

2. Paul B. Diederich, "How to Measure Growth in Writing Ability," *English Journal*, 55 (1966), 435-499.

3. Charles R. Cooper, "Measuring Growth in Writing," *English Journal*, 64(1975), 11-120.

4. John A. Daly and Michael D. Miller, "The Empirical Development of an Instrument to Measure Writing Apprehension," *Research in the Teaching of English*, 9(1975), 242-249.

to describe the ways in which you feel you learn best. *Her* objective is to find out the best ways to "reach" her students; *your* objective is to describe your most productive learning environment.

2. There has been a growing public controversy over the advantages and disadvantages of T.V. viewing as compared with reading. Some people feel that the information from television is of greater importance and provides more entertainment than the information from books. Other people feel the opposite way: that books are more important than television. *Newsweek* magazine is interested in the perspective of the college student and has chosen you to respond to a particular question: If you were asked to give up one of these two experiences (T.V. viewing or reading) for the rest of your life, which would you give up more easily and why? The *Newsweek* people are interested in the reasons for your choice and plan to publish your essay in a forthcoming issue.
3. The professor in your writing class has just announced that he/she is interested in student opinion and suggestions about a grading system to be used in his/her class. He wants to devote the next class period to a discussion of what students have to say. Each student will get a chance to speak. You, as a student, are vitally concerned with the way grades are decided. Write what you intend to say to the professor and the rest of the class when your turn comes.
4. The "Energy Crisis" has made people more conscious of preserving natural gas and electricity. Imagine that you have lost the comfort of both these resources. Explain to someone who has not experienced this loss how you have had to readjust your life. Is the adjustment harsh or just different?

Students wrote on four different tasks for the two pre and two post writing samples. Students selected their writing task several days before the actual in-class writing. We believed, as did Sanders and Littlefield,⁵ that students needed time to think about, research, take notes, and rehearse what they planned to write.

OBTAINING RELIABLE RATER JUDGMENTS

According to McColly,⁶ the proper training and orientation of the rater is essential to obtaining reliable judgments about the quality of a paper. In his article, he reported on a study in which readers judged essays averaging four hundred words in length at the rate of one essay per

5. Sara E. Sanders and John H. Littlefield, "Perhaps Test Essays Can Reflect Significant Improvement in Freshman Composition," *Research in the Teaching of English* 9(1975), 145-153.

6. William McColly, "What Does Educational Research Say About the Judging of Writing Ability?," *The Journal of Educational Research*, 61(1970), 148-156.

minute. McColly explained that “if a reader is competent and if he has been well trained and oriented, his instantaneous judgment is likely to be a genuine response to the thing for which he is looking. But if he is given the time to deliberate, he is likely to accommodate his judgment to tangential or irrelevant qualities which will introduce bias into the judgment.”⁷

During the semester, the teachers read pre and post samples written by students in a previous semester. No names or dates were on the paired papers which averaged less than four hundred words each. Each teacher independently read and chose the better paper in three minutes. These papers served as practice for members of the group who would evaluate pre and post writing samples at the end of the Spring 1977 semester. As a group, they agreed about which paper of the set was better; of twenty-five sets of practice papers, they agreed that the post sample was better in twenty sets.

COLLECTING AND CODING THE SAMPLES

1. Before instruction began I assigned each teacher a block of twenty-five identification numbers (I.D.) for her students to use. Each class was limited to twenty-five students.
2. In the first two and last two weeks of instruction, each student selected a number from the teacher’s block and used it for the two pre and two post writing samples.
3. Teachers collected the samples and gave them to me. I locked them up. This procedure was repeated during the last two weeks of instruction when the students again wrote.
4. I then recorded the teacher’s name, block of identification numbers and each student’s name and identification number on a form like the following:

Instructor:		Semester:				
Course:		I.D. Numbers:				
Name	Better Paper-First Impression			Reader/Rater		
	I.D.#	Pre	Post	1	2	3

5. If two students had used the same number (e.g., number 3), I assigned an A by one of the student's numbers. Therefore, his new number became 3A.
6. Any student who wrote his name on the paper or mentioned the teacher's name, the date, or season was discarded from the group. This procedure reduced the samples to sixty-one paired sets.
7. I separated pre samples from post samples and removed the I.D. cards. By flipping a coin, I assigned an A or B in the right hand corner of the second pre writing samples. When I flipped the coin and "heads" occurred, I assigned an A; when "tails" occurred, I assigned a B. Using the student's I.D. number, I clipped the second pre and the second post samples together in random order. I gave each post writing sample of a paired set the remaining letter; for example, if a student's pre sample was 4B, his post sample was 4A. I carried out this procedure to prevent all pre samples from being assigned an A and all post samples a B—a natural ordering of the letters. Without a randomizing procedure, the ordering might have caused the rater to select the better paper by the letter code and not the quality of the paper. I coded the second pre and second post writing samples because I believed that students would have become more familiar with the rehearsal period and the writing procedure. I reasoned that students' second pre and post would reflect their writing ability to a greater extent than the first pre and post "warm-up" samples.

EVALUATING THE PAPERS

The papers were ready to be judged by the six raters. I paired raters and told them to select the better paper of a set. I gave one rater of the team five sets of papers to read in fifteen minutes, about three minutes for each set. Since they had read papers for practice throughout the semester, discussing and examining good and bad pieces of writing, I gave no instructions to the raters concerning what they should look for in the paired sets. No teacher/rater evaluated papers from her own class.

After reading the five sets of papers, the rater checked column A or B on a sheet like the following:

7. McColly, p. 150.

Reader/Rater:			Semester:		
Paper I.D. Number	Better Paper		Paper I.D. Number	Better Paper	
	A	B		A	B

Next, the rater passed the papers back to me. I gave them to the second rater who followed the same procedure. In an attempt to prevent reader fatigue⁸ and to maintain efficiency in judging, I limited the rating of the papers to ten sets a day.

When all of the papers had been read by two raters, I recorded their responses on the teacher's class list under the column "Better Paper—First Impression: Reader/Rater 1,2,3." For each paper I recorded the response of raters one and two. If their responses showed that they agreed that a paper was the better of the two, I put the paper into an "agreement" pile; if they disagreed, I put the paper into a "disagreement" pile. I submitted these papers to a third rater. Thus, I sought agreement from two raters on which paper was the better of a set; raters were judging the overall *quality* of the paper. I believed that students would write better by the end of the course and that raters would confirm my belief by selecting as the better paper the post sample more often than the pre sample.

COUNTING T-UNITS AND ERRORS IN THE SAMPLES

Teachers counted T-units and total number of words in the writing samples. They paired the first two and last two papers, took fifty T-units from each pair, and made the count. They obtained T-unit lengths by dividing the number of words by the number of T-units.⁹ They then entered the information on the following form:

8. Richard Braddock, *Research in Written Composition* (Champaign: National Council of Teachers of English, 1963), p. 11.

9. Frank O'Hare, *Sentence Combining: Improving Student Writing Without Formal Grammar Instruction* (Urbana: National Council of Teachers of English, 1973), p. 149.

Why the T-unit and error counts? I wanted to see if students were using a larger quantity of words in the post samples than they were in the pre samples. After exposing students to intensive writing instruction, I expected them to elaborate and to use more words to clarify an idea through examples, illustrate an object by naming its attributes, and point, to detail using prepositional phrases.¹¹ Hence, I expected longer sentences with a variety of embeddings and fewer deviations from standard English usage.

SCORING THE WRITING ANXIETY SCALE

Daly and Miller designated the twenty-six items of their anxiety scale as negative or positive. They offer a formula for determining writing anxiety level (see Appendix B). The lowest possible score is 26 and the highest is 130; the higher the score is, the less anxious the student.

INFORMING STUDENTS

Teachers could report information to students on a profile summary sheet like the following:

Student's Name:			Semester:		Course:	
Teacher:						
	Paper	Date	Total Words	Words per T-Unit	Deviations from Standard English	Writing Anxiety
Pre	1	.....	.....	.....	.....	.....
	2	.....	.....	.....	.....	.....
Post	3	.....	.....	.....	.....	.....
	4	.....	.....	.....	.....	.....

This profile provides the student and the teacher with important information. First, the results are diagnostic and permit students to know where they are weak or strong in several categories. If weak in certain areas, as revealed by the pre writing samples, they could work on remedying these areas during the semester. If students are still weak by

11. Francis Christensen, *Notes Toward a New Rhetoric: Six Essays for Teachers* (New York: Harper and Row, 1967), pp. 27-33.

the end of the course, they could work independently in self-help books without taking another semester-long course. Secondly, the profile sheet is helpful in that the teacher and the student can compare the two papers written before instruction began with the two papers written at the end of instruction to ascertain whether the student progressed. For example, if words per T-unit, and total number of words increased while deviances from standard English usage decreased in the set of post writing samples, then the student will have improved in his ability to produce longer, more error-free writing.

CONCLUSION

I have presented a simple scheme for measuring growth in writing that any English teacher or writing program can use. The scheme encourages the collection of qualitative and quantitative measures near the beginning and near the end of the course; the scheme encourages efficient analysis that teachers can perform far in advance of the ensuing course to examine and revise, if necessary, their existing approaches to teaching and measuring growth.

The need for such a scheme is this: (1) We must diagnose early in the course the writing skills that students are weak in and try to remediate those weaknesses; (2) as competent teachers, we must be able to demonstrate that our courses had an effect on students—that students become better writers as a result of taking the courses.

In any writing class or program we accept the fact that writing is a difficult task and growth comes slowly. However, we should be not only *willing*, but also *able* to measure growth in the writing of our students. Using this simple scheme I have presented, the overwhelming task of measuring growth in writing becomes manageable.

APPENDIX A

QUESTIONNAIRE (Daly and Miller)

Learning Center

State University of New York at Buffalo

DIRECTIONS: Below are a series of statements about writing. There are no right or wrong answers to these statements. Please indicate the degree to which each statement applies to you by circling whether you (1) strongly agree, (2) agree, (3) are uncertain, (4) disagree, or (5) strongly

disagree with the statement. While some of these statements may seem repetitious, take your time and try to be as honest as possible. Thank you for your cooperation in this matter.

1. I avoid writing. 1 2 3 4 5
2. I have no fear of my writing being evaluated. 1 2 3 4 5
3. I look forward to writing down my ideas. 1 2 3 4 5
4. I am afraid of writing essays when I know they will be evaluated. 1 2 3 4 5
5. Taking a composition course is a very frightening experience. 1 2 3 4 5
6. Handing in a composition makes me feel good. 1 2 3 4 5
7. My mind seems to go blank when I start to work on a composition. 1 2 3 4 5
8. Expressing ideas through writing seems to be a waste of time. 1 2 3 4 5
9. I would enjoy submitting my writing to magazines for evaluation and publication. 1 2 3 4 5
10. I like to write my ideas down. 1 2 3 4 5
11. I feel confident in my ability to clearly express my ideas in writing. 1 2 3 4 5
12. I like to have my friends read what I have written. 1 2 3 4 5
13. I'm nervous about writing. 1 2 3 4 5
14. People seem to enjoy what I write. 1 2 3 4 5
15. I enjoy writing. 1 2 3 4 5
16. I never seem to be able to clearly write down my ideas. 1 2 3 4 5
17. Writing is a lot of fun. 1 2 3 4 5
18. I expect to do poorly in composition classes even before I enter them. 1 2 3 4 5
19. I like seeing my thoughts on paper. 1 2 3 4 5
20. Discussing my writing with others is an enjoyable experience. 1 2 3 4 5
21. I have a terrible time organizing my ideas in a composition course. 1 2 3 4 5
22. When I hand in a composition I know I'm going to do poorly. 1 2 3 4 5
23. It's easy for me to write good compositions. 1 2 3 4 5
24. I don't think I write as well as most other people. 1 2 3 4 5
25. I don't like my compositions to be evaluated. 1 2 3 4 5
26. I'm good at writing. 1 2 3 4 5

APPENDIX B

ANXIETY SCALE SCORE SHEET

Student's Name (Print) _____

Semester Year Pre Post

Writing Apprehension =
78 + Positive Score -
Negative Score

SCORE

Question

Question

	Positive	Negative
1.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
2.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
3.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
4.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
5.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
6.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
7.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
8.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
9.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
10.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
11.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
12.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
13.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■

	Positive	Negative
14.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
15.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
16.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
17.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
18.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
19.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
20.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
21.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
22.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
23.	■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■	
24.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
25.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
26.		■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■ ■
TOTAL		