

Student Writing in the Curriculum: Not Just for English Majors

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Introduction

"Just yesterday I received a letter concerning my student loan status. The letter was signed by my bank officer. Under the assumption that this man was a college graduate, I was appalled to find three punctuation errors and one misspelling in this letter. For me, this is proof that proper writing skills have been neglected by both the educational and business communities. I hope that the Learning Through Writing program is not too little, too late." Such was the comment by a student who had been asked to comment about the Ohio State University's College of Agriculture's pilot program entitled "Learning Through Writing."

A question that had been troubling the Teaching Committee of our College of Agriculture for a number of months was the question concerning American college students and their ability to write. This concern has not only been ours but others as well. Fulwiler, in the *Phi Kappa Phi Journal*, declares, "Writing is Everybody's Business." Nearly all of the committee members agreed that college students had the potential (or ability) to express themselves better on paper. As a result of this sentiment, a sub-committee was asked to consider offering a seminar on how faculty could help their students improve their writing by incorporating more of the practice in their curriculum.

A question, however, surfaced during the discussion of the seminar that was thought provoking for the committee and that could be a question other agriculture faculty might raise. The question: "Why should the College of Agriculture concern itself with writing? Shouldn't this be the job of the English Department?" Donald J. Gray² (1988) helps answer this question in the June 1988 issue of the *Kappan*: ". . . writing should be a means of instruction in almost every subject in the curriculum. The traditional first-year course in composition and even the frequently required upper-division course in expository, technical, or professional writing are not enough to make students the fluent, confident, and effective writers that everyone wants them to be and hardly anyone thinks they are. These courses must be buttressed by courses in the sciences, the social sciences, and the humanities in which students write a thoughtfully organized sequence of papers. Writing is too important to be left to the English department." Zinsser also stated much the same thing, when he said, "My own belief is that the teaching of writing should no longer be left to English

teachers but should be made an organic part of every subject."³

After the initial success of the first workshop, the subcommittee became more involved with the recently formed University Writing Committee, who suggested that the College of Agriculture consider submitting a proposal to the Provost's office. After the necessary formality of informing our Academic Affairs committee and department chairs at appropriate meetings, a proposal, with the Dean's blessing, went over to the Provost's office. The College received the funding requested for Winter and Spring Quarter, 1988.

The Project

The project began with an introductory workshop resourced by a nationally recognized leader in the writing-across-the-curriculum movement, Dr. Andrea Lunsford. She explained that what we were attempting to do was to provide ideas and specific techniques to help faculty incorporate more writing into their courses. We held two other workshops winter quarter and two spring quarter that went into more depth by specifically working on adding writing assignments to syllabi and using other suggested writing techniques in class. Over 35 different faculty members attended these workshops with 25 faculty members meeting individually with Dr. Lunsford for help with their courses. Also during spring quarter, four graduate students worked with six core faculty members on intensive evaluation of seven different courses. Approximately 200 students were involved in the seven core courses. Our evaluation efforts to measure both process and product of this writing effort included faculty and graduate pre-tests, student pre-tests, student writing assignments, faculty post-tests, faculty and teaching associate observations, student interviews, student writing assignments, student post-tests, faculty interviews, and teaching associate interviews.

Evaluation Methodology

FACULTY AND GRADUATE STUDENTS

Attitude. Faculty and graduate teaching associate attitudes were measured using pretest/posttest instruments. The pretest-posttest instruments each included a thirty-two item attitude scale. Twenty-two of the items related to attitudes about writing in general. The remaining ten items related to attitudes about the Learning Through Writing Program, specifically. The scale for all items was a four point Likert-type scale with response categories of: Strongly Disagree = 1, Disagree = 2, Agree = 3, and Strongly Agree = 4. The results of these two scales were analyzed separately.

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Knowledge. Change in faculty/graduate teaching associate knowledge was measured by two scales on the pretest and posttest instruments. The first scale contained twenty-two true/false statements based on information that was presented to the faculty and GTA's as part of the Learning Through Writing Program. The second scale contained twenty-eight items identifying knowledge and use of concepts and techniques used in introducing writing and critical thinking into course content. These items were also based upon information presented as part of the Learning Through Writing training. The concepts and techniques scale used the following response categories: Unfamiliar with the concept = 1, Familiar with the concept but have not used it = 2, and Familiar with the concept and have used it = 3.

Aspirations. The aspirations of faculty and graduate teaching associates to continue to utilize Learning Through Writing techniques in future courses were measured by responses to five items on the posttest instrument. The five response categories were: Definitely Will Not, Probably Will Not, Unsure, Probably Will, and Definitely Will.

Faculty and Teaching Associate Interviews. Post-program interviews with the six core faculty members and three teaching associates were conducted to measure perceptions of changes in behavior and aspirations to utilize Learning Through Writing techniques and concepts in the future.

STUDENTS

Demographics. Demographic information on the 190 students who completed a pretest instrument included: class level, age, gender, number of English courses completed, and grade point average. Students were also asked to self-rate their writing and reading skills on a scale of: Excellent, Good, Fair, or Poor. The demographic data and the self-ratings were compared with the measured variables of writing apprehension and holistically evaluated writing skills.

Writing Apprehension. Writing apprehension of students participating in a course taught by a Learning Through Writing faculty member was measured using the Daly-Miller Writing Apprehension Scale (Daly and Miller, 1975) which was included in the pretest instrument. The 26 item instrument was designed and tested for validity and reliability by Daly and Miller on college students in West Virginia. Daly and Miller determined a mean apprehension score of 79.28 for the students participating in their testing (possible low apprehension score of 26, high apprehension score of 130).

The data from the writing apprehension section of the pretest instrument were statistically compared to scores on an identical test collected on a posttest administered during the last week of Spring Quarter, 1988.

Writing Skills. Students enrolled in the seven core courses using Learning Through Writing techniques

completed a writing assignment in the first two weeks of Spring Quarter. The assignments were based on one of two writing assignment prompts developed by program staff with the help of the Department of English.

Students wrote essays in response to one of the prompts during a 48-minute class period. They were asked to write using their best writing skills. This process was repeated during the last week of Spring Quarter classes switching the prompts so that students wrote on a different, yet similar topic. The pre- and post-program student writing assignments (n=131) were holistically evaluated by a team of twelve faculty and graduate teaching associates under the supervision of faculty from the Department of English. The papers were assigned to quality ranking from a low of 1 to a high of 6. Two evaluators had to agree on a ranking value before a paper was assigned a numerical ranking. Pre-program scores were compared with post-program scores to determine if students improved writing and thinking skills during the quarter.

Student Interviews. Post-program interviews were conducted with 17 randomly selected students from the seven core courses participating in the Learning Through Writing Program. The interviews were used to determine student attitudes about the techniques used in the course.

Findings

FACULTY AND GRADUATE TEACHING ASSOCIATES

Attitude. On the general attitude scale items, the pretest mean rating was 2.88 (sd = 0.28). The posttest mean rating was 2.86 (sd = 0.17). Both of these values indicate an average response in the Agree category. There was no statistically significant difference (alpha = .05) between pre- and posttest response based on a t-test analysis of the mean ratings. (Table 1).

On the Learning Through Writing attitude items, the mean pretest rating was 3.02 (sd = 0.28);. The mean posttest rating was 3.02 (sd = 0.27). Both of these values indicate that the average attitude response to items on the Learning Through Writing Program was

Table 1. Quantitative Results of the Learning Through Writing Project by Faculty and Graduate Teaching Associates

	PRETEST		POSTTEST	
	Mean	S.D.	Mean	S.D.
KNOWLEDGE				
True/False Items (out of 22)	15.81	2.11	16.44	3.27
Familiarity/Use of Concepts*	1.64	0.22	1.73	0.33
ATTITUDE				
General Writing**	2.88	0.27	2.86	0.17
Learning Through Writing Program**	3.02	0.28	3.02	0.27

*Scale: Unfamiliar with the concept = 1; Familiar with the concept, but have not used it = 2; Familiar with the concept and have used it = 3.

**Response categories: Strongly Disagree = 1; Disagree = 2; Agree = 3; and Strongly Agree = 4.

in the Agree category. T-test analysis of the results indicated that there was no statistically significant difference on this scale as well ($\alpha = .05$). (Table 1).

Interview responses related to faculty/GTA attitude included the following:

"I think the most important single outcome that I have seen of the effort is that it got faculty thinking in terms of writing and it legitimized our use of writing in the courses where we do use it." (Faculty member)

"I think probably that the positive thought that most impressed me was that if this program works, students are going to learn that good writing is not just something that the English instructors encourage. . . that it really works, that it's really there, and that a lot of other people besides our English teachers expect them to write well." (Faculty member)

Knowledge. Pretest results of the true/false knowledge scale produced a mean score of 15.81 ($sd = 2.11$) out of a possible 22 correct responses. Posttest results produced a mean score of 16.44 ($sd = 3.27$). T-test analysis indicated no statistically significant difference ($\alpha = .05$).

The pretest mean score for the concepts and techniques scale was 1.64 ($sd = 0.22$). The posttest mean score was 1.73 ($sd = 0.33$). Statistically comparison of these mean scores ($\alpha = .05$) indicated no significant difference. (Table 1).

Interviews provided the following comments relating to faculty/GTA learning:

". . . it was, I think, a very good and very worthwhile experience. You know . . . clearly the best group learning experience that I've been involved with, in terms of teaching. Well, I'd even go further than that — the best group learning experience I've been involved with, whether it's teaching, research, or whatever." (Faculty member)

". . . the most significant thing I learned; to do smaller things, and to do it in class, and then to give them (students) feedback. . ." (Faculty member)

"I feel my abilities have improved because of the papers that I have critiqued and, you know, it makes you more aware of what you write." (Graduate teaching associate)

Aspirations. In response to the statement, "I plan to use Learning Through Writing techniques in future courses," 14 out of 16 respondents (87.6%) indicated either the Probably Will or Definitely Will category.

To the statement, "The techniques introduced through the Learning Through Writing Program will benefit future students in my classes," 14 out of 15 respondents (93.3%) chose either the Probably Will or Definitely Will category.

The statement, "I will incorporate **additional** Learning Through Writing techniques into my courses planned for future quarters," had 8 out of 13 responses (61.6%) in the Probably Will/Definitely Will categories.

None of the above statements had responses in the Probably Will Not/Definitely Will Not categories.

Ten out of 12 respondents (83.3%) indicated the Probably Will Not/Definitely Will Not categories for the statement, "I will return to the original format of my course(s) without Learning Through Writing techniques when I teach it/them again."

In response to the statement, "If I am provided a teaching assistant, I plan to continue using Learning Through Writing techniques in future classes," 9 out of 13 respondents selected the Probably Will/Definitely Will categories.

The results of the above responses were confirmed by interviews with faculty members and graduate teaching associates who indicated that they will continue to implement Learning Through Writing techniques into their future courses.

". . . I'm really excited to try it again, to do some things differently that didn't work as well. . ." (Faculty member)

". . . this (the Learning Through Writing Program) is not an isolated thing that disappears, . . . , if I can use it somewhere, I'm going to." (Faculty member)

STUDENTS

Writing Apprehension. The pre-program mean writing apprehension score ($n = 190$) on the Daly-Miller Writing Apprehension Scale was 72.09 ($sd = 15.15$). The post-program mean writing apprehension score for Learning Through Writing students was 70.84, indicating a statistically insignificant lowering of writing apprehension scores ($\alpha = .05$). (Table 2.)

Interviews provided the following comments related to writing apprehension:

"It just . . . every time I write I just hate it more and more. It didn't change anything. I still don't like it." (Student)

"I still hate it (writing), but I'm a little more comfortable with it." (Student)

". . . it was an interesting program, granted there were some times I wondered about it, but what the heck, it didn't hurt. It's too far away from your heart to kill you." (Student)

Student Writing Assignments. The holistic evaluation of the student writing assignments produced a mean pre-program writing assignments rating of 3.95 ($sd = 1.05$). The post-program mean rating was 3.75 ($sd = 1.25$). This did not represent a statistically significant difference between the two mean ratings ($\alpha = .05$).

Table 2. Quantitative Results of the Learning Through Writing Project by Students

	PRETEST		POSTTEST	
	Mean	S.D.	Mean	S.D.
Writing Apprehension***	72.09	15.12	70.84	16.30
Writing Skills****	3.95	1.05	3.75	1.25

No Significant Differences Between Pretest and Posttest Scores (Alpha = .05).

*** Possible range from 26 (low writing apprehension) to 130 (high writing apprehension).

**** Range from 1 (low) to 6 (high).

The writing assignments did indicate that those students completing the writing assignments were being evaluated as above average writing (►3) both before and after the initial program. (Table 2.)

Student comments from interviews provided additional insight to writing skill improvement:

“. . . I think it's (Learning Through Writing Program) a good idea when people really need it. I think it can be useful if you apply it correctly like we did . . . in our class I think it was really applicable. I think they did a good job with it.” (Student)

“. . . helped me to think faster. . . I have some books I use when I do write papers . . . I've been forced to look through those to get some ideas. . .” (Student)

“I don't really think they (writing activities) did (affect abilities), to be honest. I don't think they did.” (Student)

“I'm not really sure that my writing skills have changed overall. But, it did help me to condense, maybe, a lot of information into a small paragraph or maybe just one page.” (Student)

“. . . I never really thought about science, especially (subject matter), like an agricultural course in writing. . . it kind of helped me put it into a different perspective because I see that you can write a . . . I mean, writing and (subject matter) do mix.” (Student)

Conclusion

The Learning Through Writing Project in Fall 1989 has expanded to include five graduate students and nine core faculty. This expansion has come about with increased funding from the Provost's Office and the Dean of the College of Agriculture, who has put this project as one of the top priorities of the College. As the Agriculture student was quoted at the beginning of the paper as saying, “I hope it is not too little, too late.”

Gray⁴ (1988) suggests as a second reason for writing across the curriculum: “Like thinking, writing is recursive and moves with a deliberate pace. It makes a record that can be returned to, refined, and its parts

reconnected. Continual revisions make writing seem to be not the residue of thinking but a transcription of the act itself. Like the traces of atomic events in a bubble chamber, writing is a record of the mind in the act of knowing.”

Footnotes

1. Fulwiler, Toby, “Writing is Everybody's Business,” *National Forum: Phi Kappa Phi Journal*, Vol. 65, No. 4 (Fall 1985), pp. 21-24 (Reprint: UMI).

2. Gray, Donald J., “Writing Across the College Curriculum,” *Phi Delta Kappan*, Vol. 69, No. 10 (June 1988), pp. 729-733.

3. Zinsser, William, *Writing to Learn*, Harper and Row, 1988.

4. Gray, 1988.

5. Daly, J. A. and Miller, M. D., “The Empirical Development of an Instrument to Measure Writing Apprehension,” *Research in the Teaching of English*, 9 (1975), pp. 242-249.

6. Davis, J. A. (1971). *Elementary survey analysis*. Englewood, NJ: Prentice-Hall.

More On Writing In Agricultural Courses

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In the June 1986 issue of this *Journal*, David Cobia (6) discussed the potential benefits of student writing in agricultural courses. I suspect that many readers were convinced that more writing is desirable but failed to incorporate additional writing assignments into their courses because of the initial effort involved in rewriting course syllabi. Fortunately, agriculture faculty can increase the number of writing exercises and minimize aggregate effort by sharing ideas. Hansen (12) argued that economics faculty can encourage the acquisition of proficiencies by their majors if they a) develop and disseminate materials that can be helpful to instructors, such as sample assignments and evaluations of actual student responses, and b) develop a “sequence of materials that would be integrated across courses in the major.” Because agriculture majors are expected to possess certain proficiencies when they graduate, including an ability to communicate, Hansen's recommendations are as useful to animal science and plant science faculty as they are to agricultural economics and economics faculty.

The purpose of this article is unpretentious. I wish to address only the first part of Hansen's first recommendation, namely the development and dissemination of helpful materials, by providing some examples of writing assignments that may be useful in an introductory agricultural marketing course. The sample assignments may be used without modification by agricultural marketing instructors, but I hope that they will also stimulate ideas for more creative writing assignments in other agriculture courses. In addition to the sample writing assignments, the remainder of this article contains comments about student writing which complement the earlier article by Cobia.

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