

# Writing Across the Accounting Curriculum: An Experiment

Diane A. Riordan  
Michael P. Riordan  
M. Cathy Sullivan

*James Madison University, Harrisonburg, Virginia*

*To improve the writing skills of accounting students, we developed a structured writing effectiveness program across three junior level courses in the accounting major: tax, cost, and financial accounting. Writing counted for approximately five percent of the grade in each course and accounting professors discussed grammar, sentence structure, and word choice. A consulting expert on writing also contributed to the program. We tested the results of our program empirically through both a pretest/posttest design and a control/treatment group comparison. The results provide evidence that our writing across the curriculum project significantly improved the students' writing skills.*

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**W**RITING IMPROVEMENT PROGRAMS are an essential educational research topic, according to the American Accounting Association. (Williams, 1988). Researchers have found that graduates of accounting programs need to improve the quality of their written and oral communication skills in order to be successful in the profession (Hirsch, Jr., & Collins, 1988; Brown & Paapanen, 1996). Interviews with our alumni and their employers confirm the trend reported in the literature: students need additional writing skills to perform well in the work place. Changes in both the Uniform CPA Examination and the Graduate Management Admissions Test (GMAT) reflect the need for skillful writing in the business environment.

Writing across the curriculum is considered one of the most successful education reform movements in the United States (Carson, 1992). Proponents of this approach contend that incorporating writing assignments into an academic area helps students

learn the material of the particular area and expands students' writing skills (Stocks et al., 1992). Ekroth (1990) notes, "Professors are now expected not only to 'cover the material,' but also to help students to think critically, *write skillfully*, and speak competently [italics supplied]" (p. 1). Writing activities in the accounting curriculum help students to understand accounting issues, concepts, and procedures and to analyze problems while reinforcing writing skills taught in English composition and business communication courses. This article describes the structured writing program we developed across three junior level courses in our accounting major.

### **Writing Projects in the Accounting Curriculum**

Studies in accounting education describe the value of writing across the curriculum, the types of writing assignments, and the use of an outside writing expert. May and Arevalo (1983) report on a communications program within the regular accounting program at the J. M. Tull School of Accountancy at the University of Georgia. The program involved writing in-class memoranda on previously unannounced accounting topics and six- to ten-page technical papers outside of class. The written assignments, part of the three-quarter intermediate financial accounting sequence, were graded on both accounting content and effective writing and presentation. A writing consultant provided the skills necessary to teach writing and grade assignments on effective writing and presentation. Although an objective measure of improvement was not used, accounting faculty believed student writing improved.

DeLespinasse (1985) reports the results of letter-writing assignments in the accounting program at Adrian College. Students were instructed to use proper business letter format in a variety of situations to communicate technical answers to unsophisticated clients. Letters were heavily marked and returned to the students. Again, no objective measure of writing improvement was used. However, these and other kinds of on-the-job writing assignments were believed to have positive results on student performance. Writing quality in senior accounting classes was judged to be

improved. Student interest in additional writing courses appeared to increase, and graduates reported increased confidence in written communication tasks required on the job.

Hirsch and Collins (1988) report on a communications program at Southern Illinois University at Edwardsville. The program included general writing assignments in a three quarter sequence of managerial and cost accounting classes. As part of this project, students wrote memoranda to management, prepared case analyses, and critically evaluated the written work of others. Similar to the program at the University of Georgia, the project included a writing consultant from the English Department. Improvement in students' writing skills was not empirically tested due to the variety of the assignments. Nonetheless, researchers noted a steady improvement in writing skills.

Mohrweis (1991) reports the results of two studies. The first study integrated writing assignments into an intermediate financial accounting class, and the second study integrated writing assignments into an auditing class. These studies also used writing consultants to assist in evaluating students' assignments. Writing improvement in the first study was objectively measured using a multiple choice writing skills test drawn from the GMAT. Results indicate enhanced student writing skills. Results of the second study, using essay quizzes as a subjective measure of improvement, also indicate enhancement of student writing skills.

Our writing program combined and expanded on the writing programs previously reported in the literature. First, we structured a writing program across three distinct junior level accounting courses—tax, cost, and intermediate—rather than sequential accounting classes. Therefore, students received writing instruction, prepared writing assignments, and were tested on writing skills in three separate classes. Second, we included a writing expert in the structured writing program. Finally, we empirically tested the results of the structured writing program.

### **Discussion of Our Approach**

Recognizing that writing is an important skill, the faculty at our

university generally include writing projects in their upper level accounting classes. Traditional research papers are often assigned. In the traditional research paper, students are required to prepare a well documented manuscript with a minimum number of pages on a specific topic or thesis. Examples of topics of past assignments in the junior level cost accounting class are "Productivity Measurement," "Future Cost Accounting Systems," and "Transfer Pricing." Group project assignments in the accounting systems classes also require writing. Subsequent to case analysis, groups of junior level systems students submit written reports identifying internal control deficiencies similar to the management letter found in independent audits. The intermediate accounting classes use short answer tests.

Our experiment differed from our accounting program's historical approach in the following ways. First, the accounting program required all junior level students to purchase *Effective Writing: A Handbook for Accountants* by May and May (1996). The handbook is a comprehensive reference designed to help accounting students and practitioners improve their writing skills. In addition to chapters on writing principles, the handbook contains chapters on constructing letters, memos, and reports used by accountants in actual practice. In-class lectures reinforced the handbook's advice, especially on writing style.

In addition, we three faculty in the accounting program designed a structured writing program across the accounting major during the junior year. Writing contributed approximately five percent of the course grade in each of the tax, cost, and intermediate accounting courses. The accounting professors lectured on grammar, sentence structure, and word choice in their respective tax, cost, and intermediate accounting classes.

To facilitate evaluation of the students' writing, the accounting program hired a writing expert. She was a graduate assistant who was subsequently hired as an instructor by the English Department. Homework assignments, quizzes, and major projects were administered in each of the courses and graded by the outside writing expert. The writing assignments required the use of many

chapters in the writing handbook, such as the chapters on technical research and communicating results of research. The writing expert and the accounting professor graded the quizzes and major projects for each course.

The homework from the handbook involved exercises that included situations the students are likely to encounter in the accounting workplace. The exercises were designed to build skills in identifying major sentence errors including problems with verbs, pronouns; plurals, and modifiers; parallel sentence structure; use of commas, apostrophes, colons, and semicolons; and direct quotations. A series of in-class exercises required students to (1) identify and correct fragments, comma splices, or fused sentences; (2) bring subjects and verbs into agreement; (3) identify and correct shifts in mood or tense; (4) eliminate the use of faulty pronouns.

After assignments were graded, students were given a second chance to earn additional points by revising their assignments. We chose this approach because it is our opinion that both feedback and rewriting are required in order for students to improve their writing skills.

In-class quizzes included correcting sentences and writing a one-page response to an accounting topic. For example, tax students were asked to compare and contrast a tax return form required to be filed in the year 1865 with the current tax form 1040. Both the writing expert and the accounting professor graded the responses. The writing expert graded the responses for grammar and spelling as well as for organization and clarity. The professor graded the responses for content. Students were again given the opportunity to revise their original submission for an improved score.

The major projects, which were assigned towards the end of the semester, were a tax advisory letter, a memorandum to management discussing the ethical considerations of a business decision, and a memorandum to management on the appropriateness of financial disclosure. Again, both the writing expert and the professor assigning the project graded these projects. The writing expert graded the projects on organization and style of writing

(including clarity, conciseness, and coherence) and the correct use of grammar and syntax. The professor graded the projects for research effort and content. Students were again offered the opportunity to rewrite.

## **Evaluation**

The effectiveness of this writing project was tested using pretest/posttest and control/treatment group comparison analyses (Campbell & Stanley, 1963). A business letter containing twenty-six errors in grammar, syntax, and organization was used as the instrument to measure improvement in students' writing skills. Letters are important in the accounting environment because they are the vehicles in which we express our professional opinion and dispense advice. In an earlier writing improvement project, deLespinasse (1985) reported using the letter as a tool to improve accounting students' writing performance. More important, such fundamental skills—good grammar, accurate spelling, and simple organization—are prerequisite in all forms of technical writing.

In the pretest/posttest analysis 65 junior level students read and corrected a business letter during the first week of classes in the fall semester of their junior year. The letter (see the Appendix) was adapted from May and May (1996). Our modified letter and suggested solution were reviewed by an English professor at our university.

Scores on the corrected letter consisted of one point for each error not caught or for wrongly identifying as an error something that was correct. Therefore, the lower the score, the better the performance. Subjects were never given a corrected version of the letter.

The same instrument was administered to these subjects during the first week of classes the following year (their senior year) after participating in the structured writing across the curriculum project for one academic year. Subjects significantly improved their pretest scores ( $p = .0001$ ) by sixteen percent. Therefore, the writing across the curriculum project did improve student writing skills.

Because professors in our accounting program, as well as our university, have traditionally included writing assignments in their courses, we expect student writing to improve each year. Therefore, in order to test the impact of our *structured* writing program during the junior year, we performed a second analysis using a control group.

At the beginning of the academic year in which the writing across the curriculum project was introduced for the junior level students, 94 senior level students also read and corrected the business letter. These students served as the control group for a control/treatment group analysis. Although these students had been exposed to writing in their coursework, they had not participated in a structured writing program across their tax, cost, and intermediate classes during their junior year.

The treatment group was the 65 junior level students who participated in the structured writing across the curriculum program. Control group scores were compared to the scores of the treatment group at the beginning of their senior year. The structured writing across the curriculum program had a positive impact on student writing. Subjects in the treatment group significantly ( $p = .02$ ) outperformed subjects in the control group by five and one-half percent.

In the pretest/posttest analysis, subjects improved their writing scores sixteen percent ( $p = .0001$ ) after involvement in the structured writing across the accounting curriculum program. In the control/treatment group analysis, those subjects involved in a structured writing across the accounting curriculum program scored five and one-half percent ( $p = .02$ ) better than the control group. We draw two conclusions from comparing the two analyses. First, at our institution, students' writing improves throughout the course of their junior year. Second, a structured writing across the curriculum program significantly increased the improvement in writing skills obtained during the junior year.

## **Conclusion**

This project asked students to apply their accounting knowledge

and writing skills to the various technical documents they may be required to produce in the workplace. In addition to improving our students' fundamental writing skills, the project initiated professional research planning and content evaluation. Hirsch and Collins (1988) suggest that if students are consistently required to associate good communication habits with the presentation of good technical material, the process becomes second nature to them. If this synthesis is accomplished in the classroom, the two processes are inextricably interwoven such that they are never perceived as separate entities again.

Similar to the Mohrweis project (1991), this experiment required students to write on topics and in situations that an accountant is expected to encounter in the workplace. Students addressed memoranda and advisory letters to a clearly defined audience (manager, client). Stout et al. (1991) encourage this type of exercise and suggest that students gain a greater sense of realism when writing to a specific audience. The structured writing program itself indicated to students the importance of writing in the accounting environment.

Using the May and May handbook reinforced the accounting culture. Each of the sentences in the exercises of the handbook relates to an accounting context. Some of the sentences used in the grammar exercises provoked discussion of an accounting topic. For example, many junior level students in the tax class lacked knowledge of the meaning of a "qualified opinion." Using the book forced an unplanned integration in the upper level curriculum. Additionally, it is our opinion that repetitive exposure to such terms in varied contexts also contributed to the overall education of our majors.

Our aim was to develop a program that would improve our students' writing skills. We recognize that one instrument cannot capture the many skills that may ultimately determine the success of a writing assignment. Although the results of our empirical testing of improved writing skills are limited, students were able to recognize grammar, spelling, and organization errors resident in a business letter. These skills are required as a foundation for suc-



cessful technical writing. Students were given the opportunity to rewrite their quizzes and projects as part of our program, and we believe their rewritten products indicated that planning and organization improved as well. We believe that the combination of the statistical results of our empirical testing of fundamental skills and students' demonstrated improvement during the rewriting of their assignments provides evidence that similar projects, if not the cure, will certainly contribute to our efforts to improve accounting students' writing skills.

A concern of many academics with writing across the curriculum projects is that many of us are not qualified as English instructors. We relied on the handbook for instructional guidance and on the writing expert for grading. We experienced varying levels of comfort in delivering the classroom lectures. Another concern with this approach is that teaching writing is time intensive. Even with the help of the writing expert, the course required significantly more preparation and grading time. Additionally, accounting is a discipline-specific course. We must continue to weigh the benefit of paring specific course content in order to allow time for writing instruction.

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**Address correspondence to** Diane A. Riordan, Department of Accounting, James Madison University, Harrisonburg VA 22807 (e-mail: riordada@jmu.edu).

### **Appendix. Test Letter**

(based on May & May, 1996)

Ellen Acker, CPA  
331 J. M. Tull Street  
Manhattan, KS 66502

Dear Ms. Acker,

As you well know a constant threat of litigation exists. This year our company is facing several lawsuits. We are unsure how these suits should be treated in our financial statements and our management requests clarification before this year's audit.

Please specify the disclosure requirements for the following circumstances;

- 1 As reported in The Wall Street Journal, several dog owners have filed a class-action suit concerning the product "Shampoodle." The group of plaintiffs claim that their pets have suffered severe hair loss as a result of product use. This is for a total of \$2 million.
- 2 We produce a dog food called "Ken-L-Burger." We recently changed the formula and advertised the product as "better tasting." A consumer group known as "Spokespeople for Dogs" filed a suit claiming that humans must actually eat the product to make a claim of better taste. Our lawyers have said that the probability of losing this suit is remote. The suit is for \$6 million.

3 One of our workers lost a finger in the "Ken-L-Burger" machine and he has filed a lawsuit for pain and suffering which our attorneys believe we will probably lose the suit, but they are unsure about the amount. The suit claims financial loss for the finger, how his earning capacity has been reduced, and damages for pain and suffering.

4 A grain company sold us several tons of spoiled oats corn and bran used as filler in our products. Because the company will not reimburse us for spoilage, we have sued for \$2 million. Our attorneys however say we will probably win the case.

5 We aired several commercials claiming Michael Jordan's dog uses our products. According to Mr. Jordan a member of the Chicago Bulls, "My dog hates your products. If you show the commercials again, I will sue." Michael Jordan recently signed a \$30 million contract with the Chicago Bulls.

If each of these items are material, should we show them on the financial statements? Thank you for your help on these disclosures. Please respond to the above-mentioned items prior to our scheduled audit.

Sincerely,

Kenneth L. Price

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