

Western Society for Kinesiology and Wellness  
John Massengale Papers

## **THE DISCIPLINE IN KINESIOLOGY AND PROFESSIONAL WRITING**

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### **Abstract**

The purpose was to examine the effect of writing revision opportunities across gender. Twenty two university freshman and sophomore male (G1M; n=11) and female (G2F; n=11) students were chosen randomly from the Kinesiology program. Writing protocol and instruction was provided by the instructor. Teacher Assistants (TA) were used to score the assignments. Students critiqued a peer refereed journal article. The first draft focused on format. The second draft (first revision) focused on format and graphics. The third draft (second revision) focused on format, graphics, and content. All previous drafts were stapled in sequence to provide feedback. H1: There was no gender differences in beginning scores ( $p=0.5$ ). H 2: There was no difference in final score ( $p=.48$ ). H3: There was no difference in number of revisions ( $p=.33$ ). Most university students in Kinesiology chose to revise written work between 3-6 times.

### **PURPOSE**

Revision provided the opportunity to define arguments and find interconnections between pieces of information (Fitzgerald, (1987). The process of re-writing was described as both mental and actual (Fitzgerald, 1987), or at the surface/format or meaning/content level (Bailey & Vardi, 2009). But, "...since writing in the discipline [of Kinesiology was] not uniform..." (Vardi, 2009, p. 350), a system of text-specific feedback was required (Vardi, 2009, Bailey & Vardi, 2009, Fitzgerald, 1987). The purpose of this study was to examine the effect of revision opportunities and feedback on the quality of writing in the profession.

**Null Hypothesis 1:** There was no difference in beginning scores between male and female students.

**Null Hypothesis 2:** There was no difference in final scored outcome between male and female students.

**Null Hypothesis 3:** There was no difference in number of revisions undertaken between male and female students.

### **METHODS**

Methods for this study included discussion of subjects, instrumentation, procedures and statistics.

## Participants

The population for this study consisted of university freshman and sophomore students (N=22). Participants were selected randomly from a university class in Kinesiology. Subjects were divided into a group of males (G1<sub>M</sub>; n=11) and a group of females (G2<sub>F</sub>; n=11).

## Instrumentation

The writing protocol that was used included instructions on format, graphic, and content of the assigned abstract. In addition, examples of the abstracts from previous classes were distributed to the students. Trained undergraduate Teacher Assistants (TA) were used to score the abstracts received from the students (Donlan, 1980). TA's attended selected scoring seminars (Beach, 1986; Murray, 1982) in which instruction on scoring techniques were explained.

## Procedure

Subjects were not informed about participation in the study to prevent the Hawthorne effect (Mayo, 1933; Landsberger, 1958). The protocols for the abstract were distributed to the class. The assignment was explained by the instructor and again in small TA groups of 4-6 students. The students met with the TA's in small groups every week. Students were asked to write an abstract outlining a chosen peer refereed journal article. The article was approved by the TA to qualify for the assignment. The draft was reviewed by the TA and was scored in three categories: Format (Vardi, 2009, p354, local feedback), Graphics (Hammond, 1971, p4; outcome feedback), and Content (Olson & Raffeld, 1987; Ashwell, 2000; meaning-focused feedback).

Papers were scored and feedback provided in a staggered but systematic manner. The first draft grading process used format as its focus (surface critique: Fitzgerald, 1997, p.483). The second draft or first revision focused on format plus graphics (visual reporting: Meyer, 1991). The third draft or second revision focused on format, graphics, plus content (connectivity or flow). All subsequent drafts included all three categories used to score the assignments (this stepwise/staggered progression resulted in end score greatest improvement in format, followed by graphics, followed by content) (Vardi, 2009, p.355; see Figure 2). All previous drafts were stapled in sequence to the newest revision. This provided augmented feedback on two levels. The first level, knowledge of results, was indicated by new scores and comments on the newest revision. The second level of feedback, knowledge of performance (Magill, 2007), was provided by the presence of previous revisions and the changes in suggestions/comments over time (Hammond, 1971; Olson & Raffeld, 1987). **Statistics.** Group means were calculated for beginning scores, for improvement on revisions (ending scores) and, for number of revisions. A graphic display and a two tailed t-test were used to observe differences between males and females in a beginning or first graded writing assignment, in a final

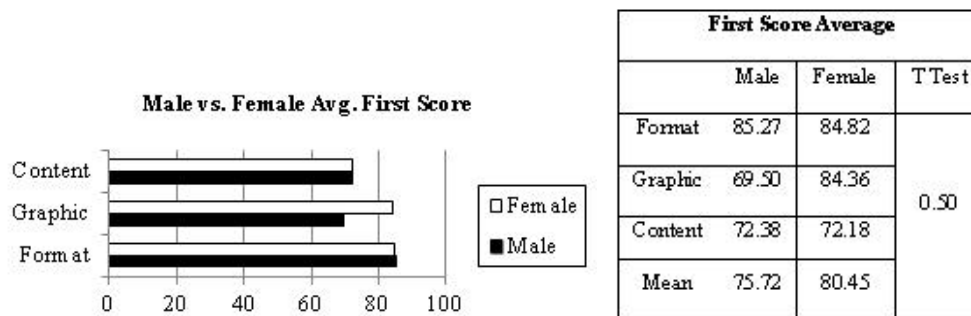
or last graded writing assignment, and in a comparison of the number of attempts at revision. An alpha level of 0.05 was used as the decision rule for differences.

## RESULTS

Three hypotheses were tested. Beginning, and ending scores, as well as number of attempts were considered.

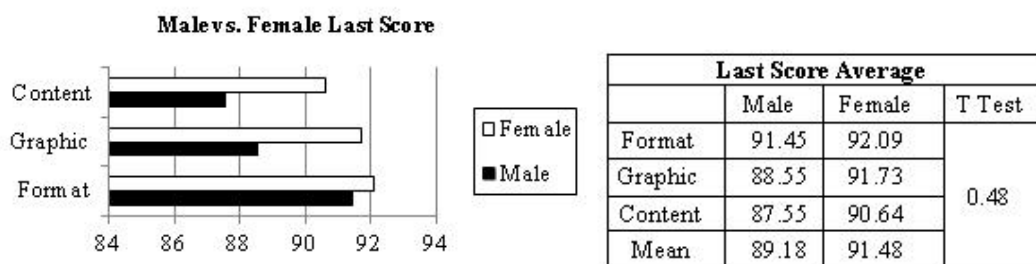
**Hypothesis 1:** There was no difference in beginning scores between male and female students.

Display of data indicated a possible difference between males and females in the graphic portion of the paper (see Figure 1). Both content and format assessment appeared to produce the same results between males and females. When a t-test was calculated on the same data used for display in Figure 1, no differences were found (see Table 1).



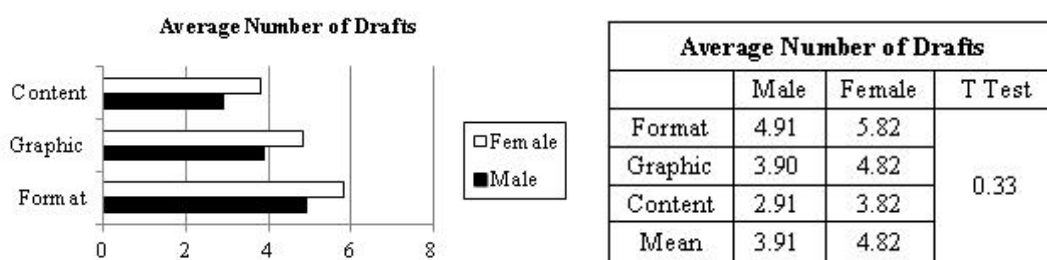
**Hypothesis 2:** There was no difference in final scored outcome between male and female students.

Females had an overall higher score in all categories. Display of data indicated a possible difference between males and females in content and graphics (Figure 2). Format assessment appeared to produce the same result between males and females. When a t-test was calculated on the same data used for display, no differences were found ( $p=.48$ ).



**Null Hypothesis 3:** There was no difference in number of revisions undertaken between male and female students.

Display of data indicated approximately one rewrite difference between males and females (see Figure 3). Females produced one more revision than did males during the same time span. Females recorded a higher number of revisions in format, graphic, and content. No statistical differences were found ( $p=.33$ ).



## DISCUSSION

The purpose of this study was to investigate the effect of revision opportunities on writing scores. Students were provided the opportunity to revise a written assignment as frequently as time would allow. Most university students in Kinesiology chose to revise written work 5-6 times on format, 4-5 times on graphic, and 3-4 times on content. When additional time was allowed in pilot work, students revised up to ten ( $n=10$ ) times in a semester in each category.

The professional writing curriculum, content focused course in Kinesiology simultaneously involved 74 students. Only 22 students were selected randomly to participate in the revision tracking system. A stagger system was used to involve each of three evaluated parts of the paper in a systematic introduction of assessment. The stagger system was considered appropriate since "...students may be faced with too many changes to absorb and incorporate..." when everything was corrected at one time (Barnett, 1989, p. 33). Feedback was kept separate to avoid confusing students about attending to comments on too many categories of performance (Zamel, 1985; Ashwell, 2000).

In addition, TA training seminars and workshops were conducted immediately prior to grading sessions in which grading rubrics were discussed and practiced. A stagger or organized system (format, graphic, content) was used to effectively communicate comments in a structured manner to the student. In previous trials, most students were unable to change multiple parts of the paper during the initial revision process. By staggering, students were able to add one additional category to the writing process during each of the first three drafts.

It was not a surprise to find that overall females demonstrated a slight advantage in proficiency of writing. Bar and Pidgen (2002) indicated that males often were unmotivated in academic activities. Further, "...[males] remain[ed] unmotivated and demonstrate[d] a particular resistance to revisiting and revising... written work (Jones & Myhill, 2007, p. 458).

## REFERENCES

- Ashwell, T. (2000). Patterns of teacher response to student writing in a multiple-draft composition classroom: Is content feedback followed by form feedback the best method? *Journal of Second Language Writing, 9*, 227-257.
- Bailey, J. & Vardi I. (2009). Iterative feedback: Impacts on student writing. Presented at *HERDSA Annual International Conference, Melbourne, Australia, July 1999*.
- Barnett, M.A. (1989). Writing as a process. *The French review, 63*(1), 31-44.
- Barrs, M. & Pidgeon, S. (2002). *Boys and writing*. London, England: Centre for Literacy and Primary Education [CLPE].
- Beach, R. (1986). Demonstrating techniques for assessing writing in the writing conference. *College Composition and Communication, 37*, 56-65.
- Dolan, D. (1980). Teaching models, experience, and locus of control: Analysis of a summer in-service program for composition teachers. *Research in the Teaching of English, 14*, 319-330.
- Fitzgerald, J. (1987). Research on revision in writing. *Review of Educational Research, 57*(4), 481-506.
- Hammond, K.R. (1971). Computer graphics as an aid to learning. *American Association for the Advancement of Science, 172*, 903-908.
- Jones, S. & Myhill, D. (2007). Discourses of difference? Examining gender differences in linguistic characteristics of writing. *Canadian Journal of Education, 30*(2), 456-482.
- Landsberger, H. A. (1958). Chapter II: The Hawthorne Studies. In *Hawthorne Revisited: Management and the worker, its critics, and developments in human relations in industry* (pp. 4-27). Geneva, NY: W.F. Humphrey Press Inc.
- Mayo, E. (1933). Chapter III: the Hawthorne Experiment. Western Electric Company. In *The human problems of an industrial civilization* (pp. 55-76). New York, NY: The Macmillan Company.
- McGill, R.A. (2007). *Motor learning and control: : Concepts and applications* (8<sup>rd</sup> ed.). New York, NY: McGraw-Hill Co. Inc.
- Meyer, A.D. (1991). Visual data in organizational research. *Organizational Science, 2*(2), 218-236.
- Murray, D.M. (1982). Teaching the other self: The writer's first reader. *College Composition and Communication, 33*, 140-147.
- Olson, M.W. & Raffeld, P. (1987). The effects of written comments on the quality of student compositions and the learning of content. *Reading Psychology, 8*, 273 - 293.
- Vardi, I. (2009). The relationship between feedback and change in tertiary student writing in the disciplines. *International Journal of Teaching and Learning in Higher Education, 20*(3), 350-361.
- Zamel, V. (1985). Responding to student writing. *TESOL Quarterly 19*(1), 79±101.