THE INFLUENCE OF WRITING ON READING

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A relationship between reading and writing has long been acknowledged by authorities in both fields. Reading and writing are considered part of a total language process, with reciprocal interrelationship, and several studies have indicated that some relationship does exist. Barbig and La Campagne found that better writers did significantly more voluntary reading than average writers. In a study of ninth graders, Maloney found that the reading comprehension of good writers was significantly better than that attributed to average writers. Grobe & Grobe found a similar relationships between reading and writing is scarce, although the formance with college freshmen.

Although these studies indicate that a relationship between reading and writing does exist, there is little empirical evidence as to the nature or extent of the relationship. Research on causal relationships between reading and writing is scare, although the integration of language arts curricula has long been proposed by leading authorities as a means of improving reading development. Combs concluded that practice in written sentence-combining had a positive effect on reading comprehension. Doctorow, Wiltrock and Marks found that sixth grade students who were given paragraph headings and who wrote one-sentence summaries after reading paragraphs showed greater comprehension and recall than students using other methods. Gipe, in a comparison of four methods of vocabulary teaching, found that the most effective was a contextual method which included writing vocabulary words in a context. Bretzing and Kulhavy found that students who took notes requiring summarizing or paraphrasing recalled significantly more than those who used other methods or who took no notes at all. In a study of college freshmen, Collins found that expressive writing practice combined with reading instruction improved reading comprehension significantly more than did reading instruction alone.

Stotsky has cited the need for research designed specifically to measure the influence of various types of writing practice on the reading performance of secondary and post-secondary students. Shanahan has noted the need for research on the motivational effect of writing on reading. This study was designed to investigate the effect of writing on reading comprehension, vocabulary, and attitude of college freshmen enrolled in a reading course.

Definitions of terms used in the study are as follows:

Writing Component--a series of writing activities/assignments directly related to reading material being presented. The length of the writing assignment may vary from one sentence to several paragraphs.

Dictation--the practice of reading aloud to students passages of short paragraph length, which they must attempt to duplicate exactly in writing (Brown).

Reproduction--active paraphrasing of longer passages, combining elements of both dictation and summary writing, often involving notetaking. Unlike precis writing, it is done without looking at the text (Stotsky).

Paraphrase--translation of a passage, approximately the same length as the original, into a reader's own idiomatic language (Corbett).

Précis--an abstract or summary which captures the essence of a selection within a required word limit (Hood).

Expressive Writing-writing close to the self, having the characteristics of informal talk, and revealing as much about the writer as about the topic (Britton, et al).

METHOD

Forty students in the first quarter of their freshman year at the University of South Alabama were the subjects of the study. These students were admitted to the University in the Academic Opportunity Program, a developmental program for students who do not meet admission requirements.

Before registration students were randomly assigned to two reading sections arbitrarily designated the control and experimental groups. Two students assigned to the control group never registered, leaving nineteen students in the control group (eleven males, eight females) and twenty-one in the experimental group (twelve males, nine females).

A combination of pretest and posttest control group design and posttest only control group design was used. The same instructor taught both groups. Form F of the Nelson-Denny Reading Test was administered to the groups the first week of the ten-week quarter. The students were told that they would take another form of the test at the end of the quarter and that the results would be used to determine whether they needed more instruction in reading. Each group met for two periods a week, each period consisting of one hour and forty minutes. The reading material for the two groups was the same. They

used Kathleen T. McWhorter's College Reading and Study Skills, a text in workbook format. In addition, both groups read selected articles, essays, short stories, and novels. Instruction varied only in the use of the writing component for the experimental group.

The control group did no writing either in or out of class (with the exception of the final examination). Students were assigned reading selections in the text as homework and told to be prepared to go through the worksheets orally in class. They were called upon systematically to recite. Assigned in-class reading was discussed in both large and small groups. Book reports were oral. A vocabulary list, with definitions, was given to the group each week. The instructor pronounced the words and students supplied oral contexts. They were instructed to memorize the definitions and were tested by multiple choice response.

The experimental group read textbook assignments as homework but completed the textbook exercises in writing. They often wrote responses to selected in-class readings before they were discussed. Book reports were written. The group wrote in class at least once each week. The instructor wrote comments on compositions but did not grade them. The modes of writing practiced, according to their appropriateness for the materials read, were dictation, reproduction, paraphrase, précis, and expressive. Some writing assignments included a combination of two or more modes. For example, students might write a précis of an article or a story, and then write expressively about it. The same vocabulary words were given both groups, but the experimental group was required to write a phrase or sentence making a personal response to the word in a context, and were tested by filling blanks with appropriate words in sentence contexts.

The last week of the quarter, each group was administered Form E of the Nelson-Denny. In addition, both groups were given the reading portion of the Estes Attitude Scales.

RESULTS

An analysis of covariance was used to compare the performance of the two groups on the posttest, with scores on the pretest used as a covariate. Tests for homogeneity of regression indicated parallel regression slopes. There were significant differences between the groups on the Nelson-Denny Total Test, the Vocabulary Subtest, and the Comprehension Subtest (see Table I).

A one-tailed t-test was used to compare the groups on the reading section of the Estes Attitude Scales. No significant differences were found between the groups (see Table II).

DISCUSSION

The results of the study indicate that writing has a positive influence on reading, but raise several questions as well.

The question of short term/long term growth in reading should

be examined. Will students retain their gains in comprehension and vocabulary, obtained in a 10 week quarter, over a longer period of time? Why did students make more significant gains in vocabulary than in comprehension? Although basic to reading, vocabulary development is less complex than comprehension and is perhaps more amenable to short term growth. Will attitudes toward reading change significantly over longer periods of time? Since attitudes are complex and take a long time to develop, it seems logical that they are not likely to change rapidly. These questions should be addressed in follow-up studies of these students and in longitudinal studies of students in language arts programs at all levels.

More research as to exactly how writing influences reading growth would be of great help to teachers and curriculum specialists. Does writing increase sight vocabulary? Does it have a memory-enhancing effect or does it, as Aukerman suggests, have the effect of fixing orthographic-phonemic patterns of words in memory so that writing improves students' abilities to analyze unfamiliar words as well as those actually used in writing? How does writing influence comprehension? What part does listening play in writing/reading?

Further analyses of the cognitive processes involved in all modes of writing would encourage the development of related reading/writing activities and would give teachers more specific guidance than the conventional advice to "integrate" the language arts.

Remedial and developmental programs at the college level, too, could profit from more research on the reading/writing relationship. These programs typically give students isolated practice and tutorial help in separate classes of reading and writing. "Reading labs" and "writing labs" often compete for money, space, and time. The result is frequently a feeling of fragmentation on the part of both students and instructors. More research on the reading/writing relationship would perhaps result in a more holistic approach to remediation in language skills for college students.

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TABLE I ANCOVA On Nelson Denny Reading Test Scores

	Pre-test			Post test					
Grp	N	Mean	SD	Mean TOTAI	SD LTEST	Adjusted Mean	đſ	F	Р
Exper Control	21 19	72.57 69.89	21.43 19.95	79.33 67.47	15.25 18.65	78.51 68.38	.39	9.20	.004
				VOCABUI	LARY TEST	Γ			
Exper Control	21 19	34.85 34.95	12.56° 10.89	38.67 33.37	10.04 11.19	38.70 33.34	.39	6.31	.017
			C	OMPREHI	ENSION TE	ST			
Exper	21	37.71	10.65	40.67	7.36	39.88			
Control	19	34.95	10.57	34.11	10.70	34.98	39	5.46	.025

TABLE II

ONE-TAILED T-TEST RESULTS FOR READING SECTION OF ESTES ATTITUDE SCALES

	<u>n</u>	$\overline{\mathbf{x}}$	SD	<u>t</u>	
Experimental	21	56.71	9.540	.358	NS
Control	19	58.53	7.947		

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