A questionnaire was sent to 166 graduate students from the Reading Center files in the Graduate School of Education at Rutgers University during the years 1965-70. Ninety-five percent responded. Publication was reported by 19 percent of the respondents. Another 38 percent wrote unpublished curriculum materials that were reproduced and distributed in their school systems. Analysis indicated that (1) college teachers published more than any other group of teachers, (2) teachers published more than nonteachers, (3) those with more than 5 years of experience, (4) doctoral students published more than masters students, (5) those who elected a course in developing materials for publication published more than those who did not, and (6) students who published their work used reading factors more frequently than those who wrote unpublished curriculum materials. Literature in the wide area of higher education and the more narrow areas of educational research, psychology, sociology, and science was reviewed to deal with publishing behavior in these allied fields. Tables and a bibliography are included. (Author/AV)
This is a study of the writing and publishing behavior of graduates and students of the reading program of the Graduate School of Education at Rutgers.

Members of the population were surveyed to see how many of them published; the relationship between publishing and employment, years of teaching experience, level of graduate study, age, and specific preparation; the extent of their training in reading as an influence on the materials they wrote and published.

A questionnaire was sent to 166 graduate students, and 95% responded.

Publication was reported by 19% of the respondents. Another 38% of the population wrote curriculum materials that were reproduced and distributed in their school systems, but not published.

College teachers published proportionately more than any other group of teachers. As a group, all teachers published more than those who did not teach. Those with more than 5 years of teaching experience published more than those with less than 5 years of teaching experience. Doctoral students published more than masters students. Those who elected a course in developing materials for publication published more than those who did not elect such a course. Age was not related to publication. Students who published their work used reading factors more frequently than those who wrote curriculum materials but did not publish.
THE PUBLISHING BEHAVIOR
OF GRADUATE STUDENTS IN READING

A THESIS
SUBMITTED TO THE FACULTY
OF THE GRADUATE SCHOOL OF EDUCATION
OF
RUTGERS UNIVERSITY
THE STATE UNIVERSITY OF NEW JERSEY

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CATHERINE SCHHEADER

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DEAN:
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CHAPTER I

THE PROBLEM

Basal and supplementary reading series are written by teams made up of teachers, as well as professional writers. One of the vocational options for a teacher trained in reading is, therefore, the preparation of reading materials.

Moreover, teachers, and particularly those at the higher levels of education, are expected to contribute to educational literature by writing journal articles and books. Even elementary school teachers are encouraged to write, judging from the application forms for elementary teaching positions which include space for published articles. See Appendix I for a sample form.

This study investigates the writing and publishing behavior of graduate students in reading. It examines:

(1) the characteristics of the graduate students who publish, and
(2) the influence of their knowledge of reading instruction upon their writing.

Statement of the Problem

(1) To what extent are graduate students in reading publishing journal articles and curriculum materials?
(2) Which groups of graduate students are publishing more journal articles and curriculum materials:

(a) those teaching at college, secondary or elementary school level, or those not teaching?

(b) those with more than 5 years teaching experience, or those with less than 5 years?

(c) those who have completed or are enrolled in doctoral degree programs, or those who have completed or are enrolled in masters degree programs?

(d) those over 35 years of age, or those under 35?

(e) those who elected a course in writing curriculum materials, or those who did not?

(3) What reading concepts are reflected in the publications of the graduate students in reading?

(4) How many other graduate students have written unpublished materials for school systems? What reading concepts are reflected in their writing?

(5) Which group's work reflected the reading concepts more: the students who published, or the students who wrote but did not publish?
Definition of Terms

Almost every teacher prepares materials for use with his own students. For this study, teachers were directed to include only materials prepared with the intent of publication, or materials reproduced in some form, and distributed in a school system.

Curriculum Materials. Four categories of curriculum materials were suggested in the study, although consideration was given to categories added by respondents:

(a) textbooks, workbooks, or teachers guides,
(b) school district or state publications, courses of study, curriculum bulletins,
(c) audio-visual materials, machines, games and other media, and
(d) juvenile literature (adaptations, controlled vocabulary stories, biographies, etc.)

Published. Published materials included articles which appeared in professional journals and papers read at professional meetings, for potential publication in proceedings volumes. Commercially published curriculum materials were counted. School district distributions were studied separately for questions 4 and 5, but were not defined as published work.
Limitations of the Study

In order to study the publishing and writing behavior of graduate students in reading, the total applicable population in the files of the reading center at Rutgers University was surveyed. This population was composed of 166 students who, during 1965-70, either were awarded degrees or were still in attendance in December, 1970. Those who discontinued the program were not included. Conclusions drawn from this study should not be generalized to a wider population without further investigation of all the variables.

Another limitation of the study was the instrument, an original questionnaire designed to gather information related to this investigation. It was tested by administering it to 10 students who were not in the population.

Overview

This study will report on some of the characteristics of the Rutgers graduate students in reading who publish.

In Chapter II, pertinent studies of teachers and other professionals who publish are reported. There is some evidence related to the question of whether good teaching is harmonious with research, and whether the amount of published writing is related to eminence in one's profession.

Chapter III will describe in detail the procedure followed in answering the questions posed by the study. It will explain how the
population was selected, how the instrument was developed, and how the 
data was treated.

The questions posed by the study are answered in Chapter IV. The 
data are analyzed, and the decision of whether to reject the null hy-
pothesis, based on the data, is made. Also, a closer look at the 
findings and an interpretation of them is presented.

Chapter V summarizes the study and suggests further research.
CHAPTER II

REVIEW OF THE LITERATURE

The literature does not include a study of the publishing behavior of reading specialists. Therefore this review of literature deals with publishing behavior in allied fields where studies existed. The wide area of higher education was investigated for studies dealing with the "publish or perish" controversy. The narrower areas of educational research, psychology, sociology, and science were also investigated for studies related to publishing behavior of professionals.

Higher Education

Professors, as specialists in a given field of scholarship, are expected to communicate with other specialists in their field. Their published articles are one of their more effective means of communication. As teachers at a university, a different type of behavior, that of teaching, is demanded. The potential source of conflict which this dual allegiance might give rise to prompted discussion and investigation a few years ago.

Martin & Berry (1969) believed that the demands of the university and the profession are actually complementary, but felt that the needs of both would be better served if the two activities were kept separate. The ideal is that research, and the reporting of it, would be kept in one organizational setting, while teaching would remain in the
other. It is precisely the breakdown in this division that is at the heart of the difficulty. The rise in on-campus research is the source of the teaching-research conflict.

Whether an actual conflict exists has been argued by more than one investigator. A study of full professors, associate professors, and assistant professors at the University of Washington measured two important aspects of teaching: relative clarity of teachers' presentations, and the amount of student interest engendered in the subject matter, as rated by students. Comparison with number of publications failed to result in any relationship at all. Publishing and teaching neither go together, nor do they conflict. (Voeks, 1962)

Other students of the controversy considered it a misconception, and pointed out that the problem was usually viewed from the perspective of whether one was a member of the tenure-granting committee of a research-oriented university or one of the student body. Therefore, a consensus was unlikely. (Hammond et al, 1969)

Another study, which included an additional but allied variable—receipt of government support for research—reported that students rated as their best instructors those faculty members who had published articles and had received government support for research. (Bresler, 1968)

A different view is suggested by Lewis' (1967) discussion of the "publish or perish" policy as a myth perpetuated by the notoriety of a
few cases. Lewis speculated that it is a widely accepted myth because of its pragmatic features. For those who wish to rid themselves of an unwanted colleague, it is a facile excuse. On the other hand, it can function as a distractor, keeping busy with research and writing those who might take a more active (and unwelcome) interest in department affairs. For the uninformed, it seems to suggest an objective basis for decisions that are actually made subjectively. Although he noted the small amount of interest in investigating the actual existence of the dichotomy, he was able to summarize several studies.

Balyeat (1963) studied a national sample of 6,087 university faculty and administrators. He found respondents believed that in granting promotions, more weight should be given to teaching effectiveness than to research activity and publication record combined.

The present study of reading specialists did not confront the effect of publishing on effectiveness as teacher or student. It did isolate school level at which subjects were teaching to see whether any relationship existed with publishing or non-publishing.

Educational Research

A 1967 study by the American Educational Research Association examined its membership and the extent of their research and reporting activities. Approximately one-half of the AERA respondents were principal investigators on at least one research project funded either by an outside source or by the respondent's institution. It must be
pointed out that some of this "research" was, in fact, evaluation, development or demonstration.

40% of the active or associate AERA members had neither received a research grant or contract nor produced a research report, article or monograph since obtaining their highest degree. An additional 33% averaged less than one research product per year and almost two-thirds produced at the rate of between one research product every two years and one product every ten years. Only 27% of the 3,963 active and associate AERA members averaged one or more research products per year. Only slightly over 12% averaged as many as two research products annually. (Roaden & Worthen, 1970)

In a 1968 study, reviewed at the same time, 8 journals of educational research were analyzed. During the 18-month period beginning January 1, 1966, 29% of the authors or co-authors of research reports appearing in these journals held active or associate membership in AERA. Thus, more educational research was published by persons who were not members of AERA. (Roaden & Worthen, 1970)

In 1969, the same group studied papers submitted for AERA programs, and suggested that many of the inexperienced senior authors from large universities may be graduate students. When these senior authors had as a second author an experienced AERA member, their papers stood a good chance of being accepted: 80.56% vs. 53.16% for all others. This was not true of other inexperienced first authors.
Although 70% of the papers submitted were from inexperienced (with AERA) authors, little evidence was found to suggest that these papers had less chance of being accepted than those submitted by experienced authors.

The present study did not examine the research engaged in by its subjects. In general, research by reading teachers is on a small scale and is reported to one's immediate supervisor. Nor was any attempt made to assess continuity of publishing behavior. The AERA research findings were included only because they were studies of a group with a common experience, and because they reported amount of publication.

Psychology

The critical position given to publication of one's work in psychology is evident from several studies of quantitative and qualitative aspects of professional articles and books. Myers (1970) studied the frequency with which a psychologist's publications are cited in the journal literature as a reliable and verbal measure of his scientific eminence in contemporary psychology. Psychologists who are judged eminent on the basis of a variety of other independent criteria are also those most frequently cited in the current journal literature. The other criteria included receipt of the National Medal of Science, inclusion in such books as Modern Men of Science, past presidency of the American Psychology Association, and distinguished scientific
contributions.

An earlier, large-scale study identified significant contributors to psychological science. A number of quantitative indices tested against votes received from scientific peers were used as criterion of scientific eminence. Of these, the one that showed the highest correlation (.68) was "journal citation counts." (Clark, 1957) The number of citation counts was proposed as a better measure of a psychologist's eminence than the number of his own publications. (Ruja, 1956)

The most frequently quoted investigator of psychological citation practices, Dennis (1954) earlier used numbers of publications to identify the five most productive psychologists then living.

He noted that, on the whole, during their most active professional years, the most productive persons were also those same psychologists whose work was most frequently cited in scholarly works in psychology. However, at the age of their retirement, the relationship was less evident. Looking at advanced textbooks published near the age of a psychologist's retirement, Dennis found that journal articles in the bibliography were as likely to be written by an unknown as by a prominent figure in the profession.

Other investigators accounted for this by noting a tendency of professionals to look to contemporary findings to show they are "on top" of current knowledge. They believed, nevertheless, that high
producers made a greater contribution to the field than psychologists in general by virtue of publishing "a greater absolute number of high quality articles." (Platz & Blakelock, 1960)

The interest in publication of psychological work is evident in articles which appeared from time to time in The American Psychologist, which were concerned with such problems as the publication lag due to the large number of manuscripts submitted. Editors of the APA journals found it necessary to delineate the specific focus of each of their publications. (American Psychologist, 1965) In 1964, it was estimated that rejections by the various journals of the APA ranged from 50 to 88%. (Newman, 1966) Newman recommended development and publication of a set of standards and criteria to be used by editors and reviewers. This would provide a common basis for judging the significance and worth of an article. Nevertheless, in 1970, an average of four manuscripts were still rejected for every one accepted. General policies were once more reiterated, and the three most highly valued criteria again identified. (Wolff, 1970) Ethical problems involved in publishing, in a field so dependent upon teamwork, were discussed by Speigel and Keith-Speigel. (1970)

Age at which a psychologist publishes his work was looked at by Lehman, (1966) who noted that production rates for present-generation contributors were almost as large at ages 30-34 as they were at ages 35-39. Psychologists' work most often appeared in the form of journal
articles, which accounted for 85% of it.

It is not surprising that studies of psychologists' publishing behavior have been made. Like scientists, psychologists must submit findings to their peers in order to bring about advancement of knowledge.

**Sociology**

65.4% of the 3,440 sociologists surveyed by Gouldner (1965) disagreed with the statement: "a man's professional publications are the best indicator of his professional worth."

A study of 262 sociologists reported that 155 had published fewer than 3 professional journal articles in the 10 years after they received their Ph. D.'s. In the same study of 509 faculty members of a large state university, only 216 published at least 1 professional book, monograph or article annually. (Babchuk, 1962)

Another investigation of 2,451 social scientists reported that 1,277 of them had published three or more papers, and aside from dissertations, 861 had published a book. (Lazarsfeld, 1958)

Again, the present study did not attempt to evaluate publishing or teaching behavior. It did examine the percentage of subjects in a given population who published, and those who did not, as Lazarsfeld did.

**Science**

Quantity of publication was examined in an investigation of
publication of scientific work, apart from quality. It was found that highly productive scientists at major universities gained recognition more often than equally productive scientists at lesser universities. (Crane, 1965)

A well-known name is an advantage in science as elsewhere. Robert Merton (1968) questioned scientists about the regard in which they held junior authors of scientific papers. He found that if the senior author of a paper was well-known, the contribution of the junior author tended to be discounted. However, if the junior author later gained prominence, his earlier work was then recognized retroactively.

In communicating scientific knowledge, this tendency is even more marked. Because of the plethora of scientific information, peers read primarily the works of well-known authors to keep abreast. However, Merton conceded that skill of presentation might be an operative factor as well, since a more experienced professional would know what not to publish, and would organize and present his material in a superior manner.

The present study examined the publishing of students in one program at one major university, and did not attempt to make comparisons with other types of institutions. Nor did it delineate reported publication, according to whether the subject was a junior or senior author. The two studies of scientists were included to indicate direction that further research on reading specialists might take.
Summary

Existing studies of those in higher education, educational research, psychology, sociology, and science were studied. In higher education, there was disagreement over whether teaching and research activities were in conflict. Student evaluation of effective teaching was compared with amount of research and one study reported a correlation while another could not find one. (Voeks, 1962) (Bresler, 1968)

Those who engaged in educational research devoted most of their time to other unspecified professional activities. (Educational Researcher, 1970) Experienced members of the association did not seem to have an advantage over inexperienced members in having program papers accepted. (Educational Researcher, 1969)

Correlations were noted between psychologists' eminence in their field and citations by other writers. (Myers, 1970) (Clark, 1957) Contemporaneity was also a factor affecting number of citations. (Dennis, 1954) Psychologists were concerned with quality of publication and criteria for publication. (Newmen, 1966) (Wolff, 1970) Age was examined and found unrelated to amount of publication. Professional journals accounted for 85% of publications. (Lehman, 1966)

Sociologists surveyed by one investigator rejected publication as an indicator of professional worth. (Gouldner, 1965) They tended to publish less than in the broader field of higher education. (Babchuk,
1962) Another investigation reported a similar publication rate — about 50% — and noted that 62% of these had published a book. (Lazarsfeld, 1958)

Scientists who were prominent were likely to publish their work. More attention was paid to already prominent than to beginning scientists. However, earlier work was noted when scientists achieved fame. (Crane, 1965) (Merton, 1968)

No investigation of writing and publishing has been done of graduate students in the reading specialty, in spite of the fact that reading is the topic of so much educational literature. The present study attempts to present data relating to this neglected aspect.
CHAPTER III

PROCEDURE

The procedure established for investigating the publishing behavior of graduate students in reading consisted of the following steps:

(1) establishment of a criteria for the population;
(2) development of a questionnaire to gather data from the population;
(3) contact with the population, and follow-up;
(4) analysis of data;
(5) write-up of findings.

Population

The questionnaire was sent to the total population of the 166 students from the Reading Center files in the Graduate School of Education at Rutgers during the years 1965-70. Since the population was finite, no sampling was necessary.

The population included 31 students who had been awarded masters and doctoral degrees in reading since 1965; 122 students currently enrolled in the reading programs leading to masters and doctoral degrees, as well as 13 students and graduates from other departments of the Graduate School of Education who had elected at least 2 reading courses during the 1965-70 period, including a course in developing
materials for publication. Students who had taken courses in the reading program, but who later discontinued the program, were not included.

Construction of the Questionnaire

Preliminary planning of the questionnaire began with a tentative list of variables. Information such as address, telephone number, and courses taken, was not requested, since it was available from University files. The main criterion for inclusion of an item was the information it could provide relevant to the questions posed by the study. Eight questions emerged for the questionnaire. See pilot form and final form of questionnaire in Appendix II.

Coding

The last line of the questionnaire was for a signature. Anonymity was not essential and might, in fact, have been detrimental to a questionnaire which elicited information about achievement in a given area. Although it was anticipated that most respondents would sign their names, thus simplifying follow-up of unreturned questionnaires, the forms were coded to identify the unsigned. Each member of the population was assigned a number on a master sheet. A pinprick was made in his number on the master sheet and through his questionnaire form. Unsigned returns could be identified by holding them up to a light aligned with the master sheet. It was necessary to do this with only three questionnaires. (Rummell, 1964)
Responses

The questions were of a "closed-form" to secure categorized data. Requests for additions to the closed form by respondents were kept to a minimum. They were included only to insure a response, where possible doubt existed for a respondent.

Directions

Since most of the questions required a simple check, general directions were brief. Where listing of publications was requested, respondents were directed to use the other side of the sheet. This made it possible to work rapidly through the questionnaire.

Rationale for Each Question

The pilot form of the questionnaire contained seven main questions. An eighth was added, not to provide information, but to elicit a higher rate of return. See Appendix II for pilot form of the questionnaire.

**Question 1.** "Presently Employed: _Yes _No
School Level: _Elem _Sec _College
Other than School Position: _ (Please specify.)"

This question was designed to elicit information which would help to answer part (a) of question 2: which graduate students in reading are publishing professional journal articles and curriculum materials — those who are teaching at an elementary, secondary or college level,
or those not teaching?

**Question 2.** "Years of teaching experience:

- More than 5 years
- Less than 5 years"

Information elicited from this question attempted to answer part (b) of question 2: which graduate students in reading are publishing -- those with more than 5 years of teaching experience, or those with less?

**Question 3.** "Highest level of education completed:

- Doctoral degree
- Master's degree
- Bachelor's degree"

This information was analyzed to answer part (c) of question 2: which graduate students in reading are publishing -- those with doctoral or masters degrees, or those enrolled in programs leading to those degrees. When complete returns were received, it was evident that too few respondents had received doctoral degrees to include them in a separate category. They were therefore counted along with respondents who were currently enrolled in the doctoral degree program. In the same way, masters degree candidates were combined with those who had received their masters degrees.

**Question 4.** "Age

- Under 35
- Over 35"

This question was included in order to help answer part (d) of question 2: who wrote more professional journal articles and curriculum materials -- graduate students in reading who were under 35 years of age, or those who were over 35 years of age?

**Question 5.** "Number of Articles Written for Publication in
Professional Journals: __ 0 __ 1 __ 2, __ 3 or more"

Question 5 provided information to answer questions 1 and 2 posed by the study.

Question 6. "Check any of the following that you have worked on: textbooks, workbooks, or teachers' guides; school district or state publications, courses of study, curriculum bulletins, etc.; audio-visual materials, machines, games, other media; juvenile literature (adaptations, controlled vocabulary stories, biographies, etc.) other (publicity, newspaper, copyrighting, editorial)"

Question 6 elicited information which helped to answer questions 1 and 2 posed by the study.

Question 7. "Reading Concepts Reflected in Your Writing:
(a) Physiological: vision, hearing, touch
(b) Psychological: mediating activity, motivation, and reward
(c) Sociological: disadvantaged, self-esteem, attitudes and interest
(d) Methods: beginning reading, reading improvement, remedial reading
(e) Skills: word recognition, content area reading, rate, phonics, reference skills and comprehension
(f) Organization: grouping, experimentation, evaluation
(g) Readability: grade level, heads, subheads, sentence
length, outlining, vocabulary, and paragraph length.

(h) Other: (Please specify)

This list of reading concepts is an adaptation of reading factors suggested by Fry as relative to the reading process. (1970)

Question 7 was designed to elicit information to help answer questions 3, 4 and 5: Have graduate students who wrote and/or published journal articles and curriculum materials included in their materials the reading factors taught in graduate courses?

**Question 8.** "Contributions through Other Professional Activities and Organizations". This question was included not to elicit information pertinent to the study, but to encourage a higher rate of response. It was theorized that graduate students who had little to report on their writing or publishing behavior would not be motivated to return the questionnaire. Since almost everyone can think of some professional contribution he has made, question 8 gave respondent an opportunity to do so.

**Added Information**

When returned questionnaires were received, a simple yes-no at the top of the page distinguished those who had elected the course, Developing Language Arts Curriculum Materials, from those who had not. This information provided data for investigating part (e) of question (2): which graduate students in reading published -- those who elected a course in writing professional journal articles and curriculum
materials, or those who did not elect such a course?

Try-out of Pilot Form of Questionnaire

Ten students in the Graduate School of Education at Rutgers who were not in the population were asked to complete a pilot form of the questionnaire. The time taken to complete the form was noted. In each case, it was less than 10 minutes. The try-out group included students who had published and those who had not. They were interviewed about the clarity of directions and questions. Some directions were rearranged after observing the try-out, and several categories were deleted.

The final form of the questionnaire was judged on the following criteria — "Summary of Best's Characteristics of a Good Questionnaire:

1. It deals with a significant topic. The significance should be clearly stated in the questionnaire or in the letter that accompanies it.

2. It seeks only that information which cannot be obtained from more factual sources.

3. It is as short as possible, and requests only essential data.

4. It is arranged efficiently, and is clearly duplicated or printed.

5. Directions are clear and complete; important terms are defined; each question deals with a single idea; categories provide for unambiguous responses.

6. The questions are objective with no hint of desired responses.
7. Questions are presented in good psychological order, proceeding from general to more specific responses.

8. It is easy to tabulate and interpret the data yield." (Hill & Kerber, 1967)

**Mailing**

The questionnaire, together with a cover letter and a stamped, self-addressed envelope, made up the mailing package.

The letter stressed the aim of the investigation -- to survey the writing and publishing behavior of graduate students -- but it also made note of other contributions to education that graduate students might have made. See Appendix III for the cover letter.

The questionnaire was mailed during the second week of February, 1971. It was timed to arrive before the Presidential holiday weekend, February 12-15, 1971. The increased leisure time of the long weekend, it was hoped, would help to increase the number of respondents.

**Responses**

Responses were received from 95% of the population who received the questionnaire. Returns were tabulated week by week for four weeks. They were received as follows:

<table>
<thead>
<tr>
<th>Week</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>66</td>
</tr>
<tr>
<td>Week 2</td>
<td>28</td>
</tr>
<tr>
<td>Week 3</td>
<td>37</td>
</tr>
<tr>
<td>Week 4</td>
<td>19 (9 by phone)</td>
</tr>
<tr>
<td>Total</td>
<td>150</td>
</tr>
</tbody>
</table>

After the first 2 weeks, a follow-up letter was sent, reiterating
the purpose of the study and the importance of securing a high percentage of responses in order to draw adequate conclusions. The follow-up mailing included another copy of the questionnaire and a stamped, self-addressed envelope. See Appendix III for a copy of the follow-up letter.

After another week, telephone calls were made to all non-respondents and answers to the questionnaire were taken down over the telephone. This was the fourth week when returns were tabulated. Returns were received in the following way:

<table>
<thead>
<tr>
<th>Responses by mail</th>
<th>141</th>
</tr>
</thead>
<tbody>
<tr>
<td>Responses by telephone</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>150</td>
</tr>
<tr>
<td>Returned by Post Office</td>
<td>7</td>
</tr>
<tr>
<td>Died, returned by survivor</td>
<td>1</td>
</tr>
<tr>
<td>Unsuccessful telephone contact</td>
<td>8</td>
</tr>
<tr>
<td>Total</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>166</td>
</tr>
</tbody>
</table>

Data were tabulated on a total of 150 returns. This was 95% of the original 158 that were delivered. Conclusions could be arrived at with confidence on the basis of such a high rate of return.

Treatment of the Data

For question 1, the percentages of students who published and those who did not were shown.

To examine the characteristic of graduate students who published, for question 2, the null hypothesis was stated as follows: there is no significant difference between those students who published journal
articles and curriculum materials and those who did not, along the parameters of:

(a) present employment,
(b) years of teaching experience,
(c) level of graduate work,
(d) age, and
(e) election, or non-election, of a course in writing journal articles and curriculum materials.

The null hypothesis posed for question 5 was stated as follows: there is no significant difference between the use of reading factors in the work of students who published and those who did not.

Since this is a problem in counting and evaluating the number of cases that fall into specified categories, and since no basis exists for assuming a normal distribution, a non-parametric statistical tool, Chi square, was used.

Data for questions 3 and 4 were simply enumerated.

Statistical Treatment

Analysis of the data to answer questions 2 and 5 followed the formula for $X^2$:

$$X^2 = \frac{(f - F)^2}{F}$$

where $f = \text{observed frequency}$, and

$F = \text{theoretical Frequency}$
The degrees of freedom were computed by the formula:

\[ df = (\text{Rows} - 1) \times (\text{Columns} - 1) \]

Summary

A questionnaire was prepared to survey the publishing and writing behavior of present and recent graduate students in reading. A pilot questionnaire form was tried out on a group of 10 students not included in the survey population. The pilot form was then revised. The final form of the questionnaire was sent to the total population of 166 graduate students who attended classes in the reading program of the Graduate School of Education at Rutgers during the years 1965-70, and had graduated, or who were currently active students in December, 1970. Data were compiled on 150, or 95% of the responses that were delivered.

Information reported on the returned questionnaire forms, as well as additional information contained in the reading center files, was recorded. Returns were tabulated and analyzed by means of a \( X^2 \) test of independence, and percentages. Additional information yielded in the questionnaire was included in descriptive form.
CHAPTER IV

FINDINGS AND DISCUSSION

This chapter presents data on the characteristics of graduate students in reading who published journal articles and curriculum materials, and the influence of their graduate training in reading on their writing. It also presents data on the influence of this training in reading on the work of students who wrote unpublished materials. This chapter also includes a discussion of the data.

The Data

The data are presented on ten tables: (1) the percentages of students who published their work, and those who did not; (2) the relationship between publishing and employment; (3) the relationship between publishing and years of teaching experience; (4) the relationship between publishing and level of graduate study; (5) the relationship between publishing and age; (6) the relationship between publishing and specific preparation; (7) the effect of training in reading on published materials; (8) the percentage of students who published, students who wrote but did not publish, and students who did not write; (9) the effect of training in reading on unpublished materials; (10) whether there was a significant difference in the influence of this training on published or unpublished materials.
Percentage of Students Who Published. The percentage of graduate students in reading who published in journals or who developed commercially published materials was calculated.

TABLE 1
NUMBER AND PERCENTAGES OF GRADUATE STUDENTS IN READING WHO PUBLISHED N = 150

<table>
<thead>
<tr>
<th></th>
<th>Published</th>
<th>Unpublished</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Graduate Students</td>
<td>29</td>
<td>19</td>
<td>121</td>
</tr>
</tbody>
</table>

Nineteen percent of the total population reported some form of publication, either journal articles, or curriculum materials, or both.

Employment. Because of the small number of college teachers in the population, and the smaller number of secondary teachers who reported publication, data for part (a) of question 2 could not be analyzed statistically by means of the $X^2$ formula. Instead raw data was used to determine the percentages within each group of elementary, secondary school and college teachers, and those not teaching, who published and did not publish.
TABLE 2  
PERCENTAGES OF THOSE WHO PUBLISHED AND THOSE WHO DID NOT PUBLISH, IN 5 EMPLOYMENT CATEGORIES \( N = 150 \)

<table>
<thead>
<tr>
<th>Position</th>
<th>Published</th>
<th>Unpublished</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
</tr>
<tr>
<td>Elementary Teacher</td>
<td>7</td>
<td>11.49</td>
<td>54</td>
</tr>
<tr>
<td>Secondary Teacher</td>
<td>4</td>
<td>23.53</td>
<td>13</td>
</tr>
<tr>
<td>College Teacher</td>
<td>8</td>
<td>42.11</td>
<td>11</td>
</tr>
<tr>
<td>Other than Teacher</td>
<td>8</td>
<td>33.33</td>
<td>16</td>
</tr>
<tr>
<td>Not Empl'd</td>
<td>2</td>
<td>6.90</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>19.33</td>
<td>121</td>
</tr>
</tbody>
</table>

A difference in publishing behavior is evident within each group. Proportionately, college teachers published more: 8 of 19, or 42.11% of them published. Exactly 1/3 of those employed in other than teaching positions published: 8 of 24, or 33.33%. Next were the secondary school teachers: 4 of 17, or 23.53%. Elementary school teachers reported publication by 7 among 60, or 11.31%. Those who were not presently working published the least: 2 of 27, or 7.90%.
Teaching Experience. The population was analyzed on the basis of publication or non-publication, and whether teaching experience exceeded 5 years or was less than 5 years.

TABLE 3
RELATION BETWEEN TEACHING EXPERIENCE & PUBLISHING N = 150

<table>
<thead>
<tr>
<th>Experience</th>
<th>Published</th>
<th>Unpublished</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obs.</td>
<td>Exp.</td>
<td>Obs.</td>
</tr>
<tr>
<td>More than 5 Years</td>
<td>26 (17.4)</td>
<td>64 (72.6)</td>
<td>90</td>
</tr>
<tr>
<td>Less than 5 Years</td>
<td>3 (11.6)</td>
<td>57 (48.4)</td>
<td>60</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>121</td>
<td>150</td>
</tr>
</tbody>
</table>

$X^2 = 13.174^*$

* Significant at the .001 level.

There is a highly significant difference favoring the publishing behavior of graduate students who taught for more than 5 years. Out of 90 of them, 26 published, while only 3 of the 57 who taught for less than 5 years published. More than sufficient grounds exist to reject part (b) of the null hypothesis posed for question 2, which stated; there is no significant difference between the publishing behavior of graduate students in reading who taught for more than 5 years and those who taught for less than 5 years.
Level of Graduate Study. The population was analyzed according to: whether one published and was enrolled in or had completed a doctoral degree program, or one was enrolled in or had completed a masters degree program.

TABLE 4
RELATIONSHIP BETWEEN LEVEL OF GRADUATE STUDY AND PUBLISHING BEHAVIOR N = 150

<table>
<thead>
<tr>
<th>Level of Graduate Study</th>
<th>Published</th>
<th>Unpublished</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obs.</td>
<td>Exp.</td>
<td>Obs.</td>
</tr>
<tr>
<td>Doctoral Degrees and Candidates</td>
<td>20</td>
<td>(7.7)</td>
<td>20</td>
</tr>
<tr>
<td>Masters Degrees and Candidates</td>
<td>9</td>
<td>(21.3)</td>
<td>101</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>121</td>
<td>150</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 33.14 \ast \]

* Significant at the .001 level.

Significantly more doctoral degree students published than masters degree students. Half of them -- 20 of a total of 40 -- published. Just 9 of the 101 students in the masters program published. There are sufficient grounds to reject part (c) of the null hypothesis posed for question 2, which stated: there is no significant difference in the
level of graduate study between those students who published, and those who did not. Instead, the statistical alternative hypothesis can be accepted.

It should also be noted, that of the 9 respondents below the doctoral level who published, all had masters degrees. Level of graduate study is significantly related to whether a student has published.

**Age.** The population was analyzed on the basis of age: whether under or over 35, to see if there was a relationship between age and publishing.

<table>
<thead>
<tr>
<th>Age</th>
<th>Published</th>
<th>Unpublished</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obs.</td>
<td>Exp.</td>
<td>Obs.</td>
</tr>
<tr>
<td>Under 35</td>
<td>11</td>
<td>(15.7)</td>
<td>70</td>
</tr>
<tr>
<td>Over 35</td>
<td>18</td>
<td>(13.3)</td>
<td>51</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>29</td>
<td></td>
<td>121</td>
</tr>
</tbody>
</table>

\[ x^2 = 3.803 \]

*Not significant at the .01 level.

Clearly, no relationship exists between age and publishing.
behavior. Of the 81 students who were under 35 years of age, 14 published; 18 of those over 35 published. No evidence exists, therefore, to reject part (d) of the null hypothesis posed for question 2, which stated: there is no significant difference between the publishing behavior of graduate students in reading who are under 35 years of age, and those who are over 35 years of age.

Specific Preparation. Twenty-seven graduate students elected the course, Developing Language Arts Curriculum Materials; 123 did not.

TABLE 6
RELATIONSHIP BETWEEN SPECIFIC PREPARATION & PUBLISHING N = 150

<table>
<thead>
<tr>
<th>Preparation</th>
<th>Published</th>
<th>Unpublished</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Obs.</td>
<td>Exp.</td>
<td>Obs.</td>
</tr>
<tr>
<td>Course</td>
<td>15 (5.2)</td>
<td>12 (21.8)</td>
<td>27</td>
</tr>
<tr>
<td>No Course</td>
<td>14 (23.8)</td>
<td>109 (99.2)</td>
<td>123</td>
</tr>
<tr>
<td>Total</td>
<td>29</td>
<td>121</td>
<td>150</td>
</tr>
</tbody>
</table>

\[ \chi^2 = 27.92 \]

* Significant at the .001 level.

The relationship between specific preparation and publishing is highly significant. While 15 of the 27 students who elected the course also published, only 14 of the remaining 109 students published their
work. More than sufficient grounds exist to reject part (e) of the null hypothesis posed for question 2, which stated; there is no significant difference in the publishing behavior of graduate students who elect a course in developing journal articles and curriculum materials and those who do not elect such a course.

Use of the Reading Factors by Those Who Published. Respondents who published checked the reading concepts reflected in their work, as shown on Table 7.

Of the 29 students who published their work, 24 indicated that they had included at least one of the listed factors in their work. The remaining 5 students checked no concepts at all.

The factor most frequently checked as pertinent to the published materials was motivation. Attitudes and interest and reading improvement received the next largest number of checks.

Respondents indicated that the disadvantaged, self-esteem, word recognition, content area reading, comprehension, experimentation, grade level and vocabulary were also influential in their materials. Outlining and paragraph length were considered least of all.
### TABLE 7

Reading Factors Reflected in the Writing of Graduate Students in Reading Who Published \( N = 29 \)

<table>
<thead>
<tr>
<th>Concepts</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>A. Physiological Factors:</strong></td>
<td></td>
</tr>
<tr>
<td>1. Vision</td>
<td>9</td>
</tr>
<tr>
<td>2. Hearing</td>
<td>5</td>
</tr>
<tr>
<td>3. Touch</td>
<td>3</td>
</tr>
<tr>
<td><strong>B. Psychological Factors:</strong></td>
<td></td>
</tr>
<tr>
<td>4. Mediating Activity</td>
<td>5</td>
</tr>
<tr>
<td>5. Motivation</td>
<td>11</td>
</tr>
<tr>
<td>6. Reward</td>
<td>7</td>
</tr>
<tr>
<td><strong>C. Sociological:</strong></td>
<td></td>
</tr>
<tr>
<td>7. Disadvantaged</td>
<td>8</td>
</tr>
<tr>
<td>8. Self-Esteem</td>
<td>8</td>
</tr>
<tr>
<td>9. Attitudes &amp; Interest</td>
<td>10</td>
</tr>
<tr>
<td><strong>D. Methods:</strong></td>
<td></td>
</tr>
<tr>
<td>10. Beginning Reading</td>
<td>5</td>
</tr>
<tr>
<td>11. Reading Improvement</td>
<td>9</td>
</tr>
<tr>
<td>12. Remedial Reading</td>
<td>7</td>
</tr>
<tr>
<td><strong>E. Skills:</strong></td>
<td></td>
</tr>
<tr>
<td>13. Word Recognition</td>
<td>8</td>
</tr>
<tr>
<td>14. Content Area Reading</td>
<td>8</td>
</tr>
<tr>
<td>15. Rate</td>
<td>6</td>
</tr>
<tr>
<td>16. Phonics</td>
<td>5</td>
</tr>
<tr>
<td>17. Reference Skills</td>
<td>5</td>
</tr>
<tr>
<td>18. Comprehension</td>
<td>8</td>
</tr>
<tr>
<td><strong>F. Organization:</strong></td>
<td></td>
</tr>
<tr>
<td>19. Grouping</td>
<td>4</td>
</tr>
<tr>
<td>20. Experimentation</td>
<td>8</td>
</tr>
<tr>
<td>21. Evaluation</td>
<td>5</td>
</tr>
<tr>
<td><strong>G. Readability:</strong></td>
<td></td>
</tr>
<tr>
<td>22. Grade Level</td>
<td>7</td>
</tr>
<tr>
<td>23. Heads, Subheads</td>
<td>2</td>
</tr>
<tr>
<td>24. Sentence Length</td>
<td>7</td>
</tr>
<tr>
<td>25. Outlining</td>
<td>1</td>
</tr>
<tr>
<td>26. Vocabulary</td>
<td>8</td>
</tr>
<tr>
<td>27. Paragraph Length</td>
<td>2</td>
</tr>
</tbody>
</table>
**Percentage of Students Who Wrote, But Did Not Publish.** In addition to the 29, or 19% of students who published their work, another 57, or 38% wrote curriculum materials and journal articles that were not published. A comparison by number and percent of the three groups is shown on Table 8.

<table>
<thead>
<tr>
<th>Table 8</th>
</tr>
</thead>
<tbody>
<tr>
<td>NUMBER AND PERCENTAGES OF GRADUATE STUDENTS IN READING WHO WROTE AND PUBLISHED, STUDENTS WHO WROTE BUT DID NOT PUBLISH, AND STUDENTS WHO DID NOT WRITE</td>
</tr>
<tr>
<td>Wrote and Published</td>
</tr>
<tr>
<td>----------------------</td>
</tr>
<tr>
<td>N</td>
</tr>
<tr>
<td>Graduate Students</td>
</tr>
</tbody>
</table>

**Use of the Reading Factors by Those Who Wrote, But Did Not Publish.**

Turning now to the respondents who wrote materials that are not published, we found that 26 of this group of 57 did not check any of the reading factors listed. Responses of the remaining 31 are shown on Table 9.

More respondents checked comprehension than any other category. Motivation was the next most frequently checked category. This was followed by content area reading and remedial reading, and then by disadvantaged, attitudes and interest, reading improvement, and word
recognition. Of all the factors, mediating activity was checked least often by those who wrote.

Comparison of Use of the Reading Factors by Those Who Published and by Those Who Wrote. Use of the reading factors can be analyzed on a yes – no basis by combining all those who checked one or more concepts as applicable to their materials. This was done for the group who published and for the group who wrote unpublished material. The data are shown on Table 9.

The group who published used the reading factors significantly more than the group that wrote, but did not publish. A full third of the writing group used no concepts at all.
TABLE 9
READING FACTORS REFLECTED IN THE WRITING OF GRADUATE STUDENTS IN READING WHO WROTE, BUT DID NOT PUBLISH N = 57

<table>
<thead>
<tr>
<th>Concepts</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Physiological Factors:</td>
<td></td>
</tr>
<tr>
<td>1. Vision</td>
<td>9</td>
</tr>
<tr>
<td>2. Hearing</td>
<td>9</td>
</tr>
<tr>
<td>3. Touch</td>
<td>5</td>
</tr>
<tr>
<td>B. Psychological Factors:</td>
<td></td>
</tr>
<tr>
<td>4. Mediating Activity</td>
<td>2</td>
</tr>
<tr>
<td>5. Motivation</td>
<td>15</td>
</tr>
<tr>
<td>6. Reward</td>
<td>9</td>
</tr>
<tr>
<td>C. Sociological:</td>
<td></td>
</tr>
<tr>
<td>7. Disadvantaged</td>
<td>12</td>
</tr>
<tr>
<td>8. Self-esteem</td>
<td>11</td>
</tr>
<tr>
<td>9. Attitudes &amp; Interest</td>
<td>12</td>
</tr>
<tr>
<td>D. Methods:</td>
<td></td>
</tr>
<tr>
<td>10. Beginning Reading</td>
<td>8</td>
</tr>
<tr>
<td>11. Reading Improvement</td>
<td>12</td>
</tr>
<tr>
<td>12. Remedial Reading</td>
<td>13</td>
</tr>
<tr>
<td>E. Skills:</td>
<td></td>
</tr>
<tr>
<td>13. Word Recognition</td>
<td>12</td>
</tr>
<tr>
<td>14. Content Area Reading</td>
<td>14</td>
</tr>
<tr>
<td>15. Rate</td>
<td>8</td>
</tr>
<tr>
<td>16. Phonics</td>
<td>8</td>
</tr>
<tr>
<td>17. Reference Skills</td>
<td>11</td>
</tr>
<tr>
<td>18. Comprehension</td>
<td>16</td>
</tr>
<tr>
<td>F. Organization:</td>
<td></td>
</tr>
<tr>
<td>19. Grouping</td>
<td>4</td>
</tr>
<tr>
<td>20. Experimentation</td>
<td>9</td>
</tr>
<tr>
<td>21. Evaluation</td>
<td>6</td>
</tr>
<tr>
<td>G. Readability:</td>
<td></td>
</tr>
<tr>
<td>22. Grade Level</td>
<td>8</td>
</tr>
<tr>
<td>23. Heads, Subheads</td>
<td>7</td>
</tr>
<tr>
<td>24. Sentence Length</td>
<td>4</td>
</tr>
<tr>
<td>25. Outlining</td>
<td>6</td>
</tr>
<tr>
<td>26. Vocabulary</td>
<td>10</td>
</tr>
<tr>
<td>27. Paragraph Length</td>
<td>4</td>
</tr>
</tbody>
</table>
TABLE 10

COMPARISON IN THE USE OF THE READING FACTORS
BY THOSE WHO PUBLISHED AND THOSE WHO WROTE N = 86

<table>
<thead>
<tr>
<th>Use of Concepts</th>
<th>Published Obs.</th>
<th>Published Exp.</th>
<th>Wrote But Did Not Publish Obs.</th>
<th>Wrote But Did Not Publish Exp.</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>No</td>
<td>5 (10.5)</td>
<td></td>
<td>26 (20.5)</td>
<td></td>
<td>31</td>
</tr>
<tr>
<td>Yes</td>
<td>24 (18.5)</td>
<td></td>
<td>31 (36.5)</td>
<td></td>
<td>55</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>29</strong></td>
<td></td>
<td><strong>57</strong></td>
<td></td>
<td><strong>86</strong></td>
</tr>
</tbody>
</table>

\[ \chi^2 = 10.93 * \]

* Significant at the .001 level.
Discussion

Almost 20% of the graduate students in reading at Rutgers have published. An additional 36% wrote unpublished materials, largely for distribution and use by other teachers within their school systems. Writers of published and unpublished materials combined exceeded 50% of the population.

Employment. A larger percentage of the college teachers published than those who taught secondary or elementary school, those who were not teaching, or those not employed. Although not statistically significant, this percentage seemed to reflect the increased opportunity and/or pressure on teachers at higher levels of education to publish. (Balyeat, 1963) A look at individual questionnaires would seem to support this. For example, the respondent who reported the largest total of publications was an associate professor of education at an eastern university.

Those who were employed in positions other than teaching reported the next highest within-group proportion of publication. This is not surprising, since of 10 such respondents, 4 were employed in writing or writing-related positions.

Smaller percentages of respondents published who taught secondary school, elementary school, and who were not presently employed.

Teaching Experience. Graduate students in reading who published
their work tended to be experienced teachers, and significantly so. From the data presented on Table 2, it is evident that those with more than five years of teaching experience published significantly more than those with fewer than five years of teaching experience.

More experienced teachers presumably would have more to report. Experience with the use of curriculum materials would perhaps lead to evaluation of existing materials, and subsequent ideas for improvement.

Experience had been isolated for the purpose of this study, but the population must be kept in mind. It is the interaction of teaching experience and graduate study which is related to publishing. No evaluation of teaching effectiveness was included, as it was in the studies reported in the literature on higher education. (Voeks, 1962) (Bresler, 1968)

Level of Graduate Study. Graduate students in reading who published had received more education than those who did not publish. About two-thirds of them had completed or were enrolled in doctoral degree programs. Of the remaining one-third, all but 1 had completed the masters degree program. The tendency to publish is closely related to higher levels of education, as the existing literature would indicate. All of the studies reported on the relation between teaching and publishing were conducted on college teachers. (Voeks, 1962) (Bresler, 1968)
Age. Age was not a factor in whether a graduate student published or did not publish. The number of students who were under age 35 and published was not significantly different from those who were over age 35.

This agrees with a study of psychologists, which reported that no relation existed between their ages and whether they published. (Lehman, 1966) This earlier study speculated on the pressure to publish as a factor in the number of psychologists under 35 who were reporting their work in professional journals.

Specific Preparation. The most highly significant difference reported in this investigation was that of specific preparation. More than half of the students who elected the course in developing materials for publication did publish their work. In contrast, less than one-sixth of those who did not take the course published. There is a clear relationship between instruction and practice in this data.

It should be noted, that no measure of continuity was applied to these students who published. Continued publication on a regular basis was not evaluated. A list of the publications as the respondents reported them is included in Appendix IV.

Influence of the Reading Factors. Questions 3, 4 and 5 were concerned with the effect of graduate training in reading on the students' written work. The data compiled to answer these questions revealed
two phenomena:

(1) In addition to the 19% of the subjects who had published their work, another 38% had written materials for use beyond their immediate needs. Some of this work had been prepared for publication, but had been unaccepted thus far. Most of the materials, however, had been developed for use and distribution within school systems.

In New Jersey, where the school systems are relatively autonomous, it is a common practice to appoint committees of teachers to develop curriculum bulletins, teachers guides, etc. While these materials are reproduced and distributed among more than one school, they are not formally published. However, they are used by teachers in much the same way that commercially published materials are. It is useful, therefore, to examine their authors along with the authors of journal articles and published curriculum materials to see whether they have included certain reading factors in writing their materials.

(2) The graduate training in reading was more influential on the published work than on the unpublished. Eighty-three percent of the respondents who published checked one or more factors, but only fifty-five percent of those who wrote, but did not publish, checked one or more factors. It is not evident from the data why such a difference occurred, but it seems to be a question worth pursuing in any extension of the present study.
CHAPTER V

SUMMARY AND SUGGESTIONS

The main findings of this study, based on the 95% of the responses received were:

(1) 19% of the graduate students in reading published.
(2) Another 38% wrote materials reproduced for distribution throughout their school systems, but not commercially published, or materials submitted for publication, but not yet accepted.
(3) Proportionately more college teachers published than any other group.
(4) Significantly more students with 5 or more years of teaching experience published than those with less than 5 years.
(5) Significantly more students in the doctoral than in the masters program published.
(6) Significantly more students who elected a course in developing materials for publication published than those who did not elect the course.
(7) Age was not significantly related to publishing.
(8) Students who published reported more influence of reading concepts in their materials than those whose work was not yet published.
These findings were based on a questionnaire sent to 166 students enrolled in the reading program at Rutgers between 1965 and 1970. Data on the 95% of the population who responded were analyzed on a percentage basis and on $\chi^2$ tests of independence.

The large percentage of responses permitted findings to be interpreted with confidence. However, the study was specifically of graduate students, and was further limited by the questionnaire. Therefore, findings cannot be generalized without examination of all the variables.

No existing studies of similar populations were found in the literature; therefore studies of publishing among other populations were examined for their relation to the present investigation.

Unlike the studies reported on higher education, this study did not try to evaluate "good teaching."

Suggestions for Further Research

Several avenues of possible research are suggested by the findings of this study.

Similar investigations of graduate students in other departments of the Graduate School of Education, as well as at other universities might be made, to provide a basis for comparison of findings. Is 19% a high percentage of publishing?

A follow-up study of the same population surveyed might try to determine why the reading factors were more influential in the work of
the published writers than in that of the unpublished writers.

A long-range study of those who elected the course in developing materials for publication might be possible. Did their publishing behavior continue? Or did it terminate soon after graduate study was completed?

The teachers in the population might be studied to see whether there was any relation between writing and promotion.

Perhaps yet another variable could be isolated for examination. The present investigation did not attempt to assess creativity in any objective way. Further research might apply standardized measures of creativity to the population. For example, it would be interesting to assess the creativity of those who elected the course and those who did not, or those who published and those who did not.
REFERENCES

Babchuk, N. & Bates, A. P. Professor or producer, the two faces of academic man. Social Forces, 1962, 40, 344.


APPENDIX I

SAMPLE APPLICATION FORM
FOR ELEMENTARY SCHOOL TEACHER
PERSONAL STATUS:
Are you married? Divorced? Widow or Widower?
Number of Children: Indicate Ages:

CITIZENSHIP:
Are you a citizen of the United States?
Have you ever been interned or arrested as an enemy alien?
Is your spouse a citizen of the United States?
Have you ever been arrested and convicted of any crime?
If so, when, where, and disposition of offense
Have you ever been a member of the United States Armed Forces, or of a state militia?

Are you now enrolled in a reserve of the armed forces of the United States?

If the answer to either of the above questions is in the affirmative, please state in what branch of the armed forces or state militia you were or are a member and give exact dates of your service.

OTHER ACTIVITIES OR EXPERIENCES: (Include Articles Published)

<table>
<thead>
<tr>
<th>Type of Activity</th>
<th>Location</th>
<th>Supervisor</th>
<th>Salary If Any</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

RELATED RESPONSIBILITY:
A person engaged in teaching is expected to participate in extra-class activities in and out of the school as a basic part of his professional work. This includes activities such as: Clubs, professional committees, P.T.A., noon-hour supervision, audio-visual director, and other responsibilities that are related to the educational program.

Comment briefly as to your effectiveness and experience in this area:
APPENDIX II

QUESTIONNAIRE FORMS
## CONTENTS OF APPENDIX II

<table>
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<th>Description</th>
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<tr>
<td>Interview Form for Pilot Questionnaire</td>
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<tr>
<td>Final Form of Questionnaire</td>
<td>56</td>
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</table>
DIRECTIONS: In answering this questionnaire, please check the appropriate space, and provide additional information when requested to do so.

1. PRESENTLY EMPLOYED: __YES__ NO
   SCHOOL LEVEL: __ELEM__ __SEC__ __CULL__
   SCHOOL POSITION: __CLASSROOM TEACHER__ __READING TCH.__ __OTHER__ (PLEASE SPECIFY)

2. YEARS OF TEACHING EXPERIENCE:

3. HIGHEST LEVEL OF EDUCATION COMPLETED:
   __BEYOND DOCTORAL DEGREE__ __BEYOND MASTER'S DEGREE__ __DOCTORAL DEGREE__ __MASTER'S DEGREE__ __BEYOND BACHELOR'S DEGREE__

4. AGE: __UNDER 35__ __OVER 35__

5. HAVE YOU WRITTEN ANY OF THE FOLLOWING IN THE PAST 5 YEARS? __YES__ __NO__
   (If yes, please give title, publisher, and date of publication. Include material published in a school system, and unpublished material. For unpublished material, please give date prepared. Use second sheet if necessary.)

   A. CURRICULUM MATERIALS:
      TEXT BOOKS
      WORK BOOKS
      TEACHERS' GUIDES
      JUVENILE LITERATURE
      TAPES, FILMS, FILMSTRIPS
      COURSES OF STUDY
      BULLETINS, REPORTS, NEWSLETTERS
      CURRICULUM OUTLINES
      ANECDOCTAL ACCOUNTS OF TEACHING
      OTHER (PLEASE SPECIFY)

   B. JOURNAL ARTICLES: (Please give title, publication, and date of publication. If unpublished, please give date prepared. Use second sheet, if necessary.)

6. DID YOU INCLUDE ANY OF THE FOLLOWING READING CONCEPTS IN PREPARING YOUR MATERIALS: __YES__ __NO__ (If yes, check below.)
   COMPREHENSION__ PHONETIC RULES__ READABILITY__
   CONTROLLED VOCABULARY__ SENTENCE LENGTH__ TESTING__
   GRADE LEVEL__ PARAGRAPH LENGTH__

7. CONTRIBUTIONS THROUGH OTHER PROFESSIONAL ACTIVITIES & ORGANIZATIONS:

   SIGNATURE
INTERVIEW FORM FOR PILOT QUESTIONNAIRE

Did you find the general directions clear?  ___ Yes  ___ No

Were the specific directions clear?  ___ Yes  ___ No

Were any questions ambiguous?  ___ Yes  ___ No

Please note number, if yes: ___

Did you object to answering any question?  ___ Yes  ___ No

Please note number, if yes: ___

Was it easy to follow the questionnaire step-by-step?  ___ Yes  ___ No

If no, could you suggest the reason?
FINAL QUESTIONNAIRE FORM

DIRECTIONS: In answering this questionnaire, please check the appropriate space, and provide additional information when requested to do so.

1. PRESENTLY EMPLOYED: YES   NO
   SCHOOL LEVEL:  _____ EL __ SEC __ COLLEGE
   OTHER THAN SCHOOL POSITION:  _____ (Please specify.)

2. YEARS OF TEACHING EXPERIENCE:  MORE THAN 5 YEARS   LESS THAN 5 YEARS

3. HIGHEST LEVEL OF EDUCATION COMPLETED:
   _____ DOCTORAL DEGREE   _____ MASTER'S DEGREE   _____ BACHELOR'S DEGREE

4. AGE:  UNDER 35   OVER 35

5. NUMBER OF ARTICLES WRITTEN FOR PUBLICATION IN PROFESSIONAL JOURNALS:
   0   1   2   3 OR MORE
   Please list articles, with titles, publication, and dates of publication, or preparation. Use other side if necessary. Please indicate if not yet published.

6. CHECK ANY OF THE FOLLOWING THAT YOU HAVE WORKED ON:
   A. TEXTBOOKS, WORKBOOKS, OR TEACHERS' GUIDES
   B. SCHOOL DISTRICT OR STATE PUBLICATION, COURSE OF STUDY, CURR. BULL., ETC.
   C. AUDIO-VISUAL MATERIALS, MACHINES, GAMES, OTHER MEDIA
   D. JUVENILE LITERATURE (ADAPTATIONS, CONTROLLED VOCABULARY STORIES, BIOG., ETC.)
   E. OTHER (PUBLICITY, NEWSPAPER, COPYRIGHTING, EDITORIAL) Please describe.
   On the other side, please give title, publisher & date. Indicate if unpublished.

7. READING CONCEPTS REFLECTED IN YOUR WRITING:
   A. PHYSIOLOGICAL FACTORS:  _____ VISION   _____ HEARING   _____ TOUCH
   B. PSYCHOLOGICAL:  _____ MEDIATING ACTIVITY   _____ MOTIVATION   _____ REWARD
   C. SOCIOLOGICAL:  _____ DISADVANTAGED   _____ SELF-ESTEEM   _____ ATTITUDES & INTEREST
   D. METHODS:  _____ BEGINNING READING   _____ READING IMPROVEMENT   _____ REMEDIAL
   E. SKILLS:  _____ WORD RECOGNITION   _____ CONTENT AREA READING   _____ RATE
                 _____ PHONICS   _____ COMPREHENSION
   F. ORGANIZATION:  _____ GROUPING   _____ EXPERIMENTATION   _____ EVALUATION
   G. READABILITY:  _____ GRADE LEVEL   _____ HEADS, SUBHEADS   _____ SENTENCE LENGTH
                    _____ OUTLINING   _____ VOCABULARY   _____ PARAGRAPH LENGTH
   H. OTHER (Please specify.)

8. CONTRIBUTIONS THROUGH OTHER PROFESSIONAL ACTIVITIES AND ORGANIZATIONS:

SIGNATURE
APPENDIX III

COVER LETTERS
### CONTENTS OF APPENDIX III

<table>
<thead>
<tr>
<th>Description</th>
<th>Page</th>
</tr>
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<td>Original Cover Letter</td>
<td>59</td>
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<tr>
<td>Follow-up Letter</td>
<td>60</td>
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</tbody>
</table>
43 Inglewood Lane
Matawan, New Jersey
February 9, 1971

Dear

Are graduate students writing and publishing? What other effects are they having on education?

Research on my master's thesis will attempt to answer these questions. You can help by completing and returning the enclosed questionnaire. It will take less than ten minutes of your time.

If you have ever written anything -- anything at all -- in hopes of publication, or if you have ever published even a few lines in a journal, a newsletter, or any type of material of an instructional nature, please indicate it on the questionnaire.

Please be complete and prompt. The stamped, self-addressed envelope is enclosed for your convenience. And thank you for your help.

Sincerely,

Enclosures
FOLLOW-UP LETTER

February 22, 1971

HELP !!!

TIME IS RUNNING OUT ...

As a current or former graduate student at Rutgers, you recently received a questionnaire on the writing behavior of graduate students. Your response is essential to the completion of my master's thesis. Every return counts!

If you have not already done so, please fill out the questionnaire as completely as possible, and return it today. The information reported is for research purposes only, and will of course, be treated confidentially.

In the event that your copy of the questionnaire has been misplaced, I am sending you another, along with a stamped, self-addressed envelope.

If you have returned the form, please disregard this reminder. Again, many thanks.

Cathy Scheader

Enclosures
APPENDIX IV

SUMMARY OF DATA SHEET
FINAL QUESTIONNAIRE FORM

DIRECTIONS: In answering this questionnaire, please check the appropriate space, and provide additional information when requested to do so.

1. PRESENTLY EMPLOYED: __YES__ __NO__ SCHOOL LEVEL: __ELEM__ __SEC__ __COLLEGE__ OTHER THAN SCHOOL POSITION: [ ] (Please specify.)

2. YEARS OF TEACHING EXPERIENCE: __MORE THAN 5 YEARS__ __LESS THAN 5 YEARS__

3. HIGHEST LEVEL OF EDUCATION COMPLETED: [ ] DOCTORAL DEGREE [ ] MASTER'S DEGREE [ ] BACHELOR'S DEGREE

4. AGE: [ ] UNDER 35 [ ] OVER 35

5. NUMBER OF ARTICLES WRITTEN FOR PUBLICATION IN PROFESSIONAL JOURNALS:

   Please list articles, with titles, publication, and dates of publication, or prepare preparation. Use other side, if necessary. Please indicate if not yet published.

6. CHECK ANY OF THE FOLLOWING THAT YOU HAVE WORKED ON:

   A. [ ] TEXTBOOKS, WORKBOOKS, OR TEACHERS' GUIDES
   B. [ ] SCHOOL DISTRICT OR STATE PUBLICATION, COURSE OF STUDY, CURR. BULL., ETC.
   C. [ ] AUDIO-VISUAL MATERIALS, MACHINES, GAMES, OTHER MEDIA
   D. [ ] JUVENILE LITERATURE (ADAPTATIONS, CONTROLLED VOCABULARY STORIES, BLOGS, ETC.)
   E. [ ] OTHER (PUBLICITY, NEWSPAPER, COPYRIGHTING, EDITORIAL) Please describe.

   On the other side, please give title, publisher & date. Indicate if unpublished.

7. READING CONCEPTS REFLECTED IN YOUR WRITING:

   A. PHYSIOLOGICAL FACTORS: [ ] VISION [ ] HEARING [ ] TOUCH
   B. PSYCHOLOGICAL: [ ] MEDIATING ACTIVITY [ ] MOTIVATION [ ] REWARD
   C. SOCIOLOGICAL: [ ] DISADVANTAGED [ ] SELF-ESTEEM [ ] ATTITUDES & INTEREST
   D. METHODS: [ ] BEGINNING READING [ ] READING IMPROVEMENT [ ] REMEDIAL
   E. SKILLS: [ ] WORD RECOGNITION [ ] CONTENT AREA READING [ ] RATE
   F. ORGANIZATION: [ ] GROUPING [ ] EXPERIMENTATION [ ] EVALUATION
   G. READABILITY: [ ] GRADE LEVEL [ ] HEADS, SUBHEADS [ ] SENTENCE LENGTH
   H. OTHER (Please specify.)

8. CONTRIBUTIONS THROUGH OTHER PROFESSIONAL ACTIVITIES AND ORGANIZATIONS:

   ________

   SIGNATURE
APPENDIX V

LIST OF GRADUATE STUDENTS' PUBLICATIONS

The following list was compiled from information reported on the questionnaires and by reference to actual publications. It is of necessity incomplete.
Bibliography

Arnold, Myrna. T-scopes and chalk boards compared in training sight words for first grade. The Reading Instruction Journal, 1969, 12, 33.


Bragg, Jane. Textbooks, workbooks & teachers guides for audio-visual aids, library skills, etc. Holt, Rinehart & Winston.


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Knapp, Margaret. 99 Phonics charts. Drier, 1970 (in press) (Writing of introduction, teaching suggestions, etc. to accompany charts.)

Knapp, Margaret. Speed reading booklets for fourth, fifth and sixth grades (in press) Drier, 1971. (Writing of controlled grade level stories and comprehension questions.)


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Kuthy, Norah. Listening comprehension of good and poor readers in ninth grade. The Reading Instruction Journal, 1969, 12, 29.

LaConte, Christine. Chapters for "We Live in a City (Denver)" and "People are Interdependent (Great Britain)" in a fourth grade social studies text. Silver Burdett Co. (in press)

LaConte, Christine. Improving Classroom Teaching in Reading. (with Nicholas Criscuolo) Handbook for in-service teachers. (in preparation)


LaConte, Christine. Review of Teaching the Child to Read. The Reading Instruction Journal, 1966, 9, 3.

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LaConte, Christine. A work-study exchange for British and American student teachers. Educational Leadership, 1969, 27, 2. (with R. LaConte)


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Rosser, Donald. New Jersey Education Association Review. Monthly feature: Curriculum Frontiers. "A weekly educational column that appears regularly in many newspapers and irregularly in a wide variety of educational publications, newspaper articles about NJEAA activities and special local problems, statewide reports, 'white papers' for the state legislature, special publications for local teacher associations..."


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Teplitsky, Alan. Language arts series games, with teachers manuals, slides and cassettes. (in press)


McInerney, Robert. Series editor for three texts to be published by Boyd-Fraser Publishing Co., aimed at junior college students.

