

THE ATTITUDES AND TEACHING PRACTICES OF
SELECTED NEWFOUNDLAND TEACHERS PERTAINING TO
READING INSTRUCTION IN THE SECONDARY SCHOOL

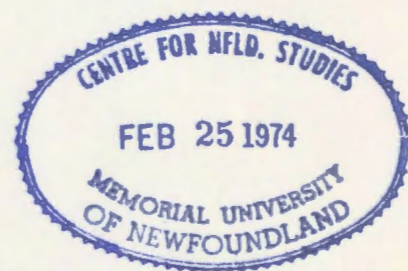
CENTRE FOR NEWFOUNDLAND STUDIES

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THE ATTITUDES AND TEACHING PRACTICES OF SELECTED NEWFOUNDLAND
TEACHERS PERTAINING TO READING INSTRUCTION IN
THE SECONDARY SCHOOL

A Thesis
Presented to
the Faculty of Education
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In Partial Fulfillment
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Master of Education



by
Brian Shortall

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ABSTRACT

This study was designed with five purposes in mind. To begin with it was designed to survey the attitudes of selected Newfoundland secondary school teachers toward reading instruction. It was also intended to survey the extent to which these teachers made use of twenty selected teaching practices indicative of good reading instruction. In addition to these things, this study assessed the extent of the correlation between a teacher's attitude and his use of the selected teaching practices. The effect of the following independent variables upon a teacher's attitude and his use of the selected practices was also investigated: teaching experience, teaching certificate, sex, subject area with which the teacher is most familiar and the number of university accredited courses in secondary reading instruction taken by each teacher. The final aim of this thesis was to provide the kind of information and recommendations appropriate for the improvement of reading instruction at the secondary level.

The population which this study investigated consisted of all the secondary school teachers working on the Burin Peninsula in Newfoundland, Canada. No sample was taken as the researcher used the entire population in his inquiry.

The data was collected by distributing a research booklet to all the subjects. Along with an explanatory letter and an appropriate information sheet, this booklet contained an Attitude Questionnaire and a Teaching Practices Questionnaire.

The data was used to test eleven hypotheses. Standard statistical computer programs for One-Way Analysis of Variance, the t-test, and the Pearson Product Moment Correlation Coefficient were employed to analyse the data.

The analysis indicated that the teachers' attitudes and extent of use of the selected practices in connection with reading instruction in the secondary school were unsatisfactory. Also, a low negative correlation was found to exist between the two. With regard to the independent variables considered by the study, none was found to significantly affect the teachers' attitudes. However, their extent of use of the teaching practices was affected by the independent variables of sex, the subject area with which they were most familiar, and the number of university accredited courses in secondary reading instruction.

Several recommendations were made by the researcher after his consideration of the findings. Among these were: (A) that steps be taken so that the various subject area teachers recognize their responsibility and role in secondary reading instruction; (B) that a professional library of teacher resources in secondary reading instruction be established at the school or district level to assist teachers with instruction; (C) that inservice programs in secondary reading instruction be instigated; (D) that before hiring new teachers their pre-service training be examined to determine if they are theoretically equipped to participate in a sound reading program for the junior and senior high school, and if they have a satisfactory attitude in this regard; (E) that consultative services be used in planning a sound reading program beyond the elementary school.

CHAPTER I

INTRODUCTION TO THE PROBLEM

In the past, North American educators have conducted many studies in an effort to improve reading instruction. The primary concern of this study rested with the secondary school teacher. It investigated his attitude and teaching practices in connection with reading instruction in the secondary school. This work confined itself to a particular geographic area in order to be of use to the local boards of education in the planning of curriculum improvements.

I. BACKGROUND TO THE STUDY

In the fall of 1971, a letter, which appears in Appendix A, was received by Memorial University's Department of Curriculum and Instruction from the Marystown Regional High School on the Burin Peninsula in the province of Newfoundland and Labrador. Through this letter, the principal of the school informed the department that he and his staff were interested in having some research, preferably a testing program, carried out on his students by the university. He singled out the area of reading as one which he and his staff would like to see investigated. Before he concluded, he went on to say that his school would gladly cooperate in any other type of educational research which was being sponsored by the department.

In consultation with Dr. O. K. Crocker of Memorial University, the author and two colleagues, Mrs. Maureen Dunne and Mr. Horace Davis, agreed

to accede to this request. They resolved to administer standard reading and intelligence tests to the pupils of the schools and to analyse the results in the light of sex, intelligence and academic performance. However, it was also realized that an opportunity existed to do several other things. One was to expand the program to include the entire district. The second was to seize the occasion to contribute to the body of research on secondary school reading instruction as well as being useful for improving the reading curriculum in that district.

To this end, two other separate district wide studies were envisioned. One would survey the reading interests of the grade nine students and investigate the appropriateness of the grade nine literature text in the light of reading interests and levels. The other would investigate reading instruction from the viewpoint of the secondary school teacher. It would survey the attitude of the teachers toward reading instruction as well as surveying their extent of use of several teaching practices indicative of good reading instruction in the secondary school. Also it would investigate the effect of several independent variables on their attitudes and teaching practices.

It was felt that these three studies would contribute, each in its own way, to the existing body of research on secondary school reading instruction. Furthermore, they perceived that the studies would reveal some vital data to be considered in planning curriculum improvements in that district. This suggestion was put to the appropriate authorities in the school district and their permission was obtained. The letters of permission appear in Appendix B and Appendix C.

II. THE PROBLEM

This study was designed to carry out five tasks. Task one was to survey the attitudes of the secondary school teachers, in a specific area, toward reading instruction. Task two was to assess the extent to which these teachers made use of twenty selected teaching practices, indicative of good secondary school reading instruction. Task three was to investigate the extent of the relationship between a teacher's attitude and his use of good secondary school reading teaching practices. Task four was to investigate the effect of the following independent variables on a secondary teacher's attitude and use of teaching practices as they relate to reading instruction: teaching experience, teaching certificate, sex, subject area with which a teacher was most familiar and the number of university accredited courses in secondary reading a teacher has had. Task five was to provide the kind of information and recommendations appropriate for the improvement of instruction in reading at the secondary level.

III. NEED FOR THE STUDY

Reading instruction in the secondary school was viewed as a problem worthy of attention. Bamman, Hogan and Greene provide a brief rationale for this.

Because teachers in the secondary school specialize in certain curricular areas when they prepare to teach, they are likely to be more heterogeneous than a typical group of elementary school teachers who expect to teach all or most of the phases of the curriculum. Consequently, many secondary teachers know little about the teaching of reading and frequently feel no responsibility for guiding their students' reading. Reading is somebody

else's business--business that is all too poorly done in the estimation of such teachers.¹

This attitude toward the problem was also expressed strongly by Harris as follows:

There is no substantial evidence, judging from that reviewed by Gray and that subsequently published to indicate that administrations and staffs of the high schools and colleges or special field teachers in the elementary school have caught the full implication of the developmental concept for the organization of reading instruction.²

Since the field of secondary school reading instruction was regarded by many authors as worthy of attention and in need of further study, the researcher decided to concentrate in this area. As with any problem there existed many avenues of approach. However, in this case, he chose to follow the advice of Artley who said: "It is necessary to train better teachers of reading than expect a panacea in the form of materials."³ In the second chapter, the importance of secondary school reading instruction along with the importance of the teacher in it will be discussed at greater length. Thus the researcher felt justified to investigate the problem from the viewpoint of the teacher.

This study also contributes to the research on secondary school reading instruction by investigating the effect, teaching experience, teacher certificate, sex, subject area of most familiarity and number of

¹Henry Bamman, Ursula Hogan, and Charles Greene, Reading Instruction in the Secondary School (New York: David McKay Company, Inc., 1967), p. 38.

²T. C. Harris, "The Teaching of Reading," Encyclopedia of Educational Research (1969), p. 1087.

³A. Sterl Artley, "The Teacher Variable in the Teaching of Reading," The Reading Teacher, 23:240, December, 1969.

university accredited courses in secondary school reading instruction have on a teacher's attitude and teaching practices in reading instruction in grades seven to eleven. Also, the interrelationship between a teacher's attitude toward reading instruction and his teaching practices in that regard were looked into.

Furthermore, attention was focused on the problem of secondary school reading instruction and educators were reminded of the powerful influence exerted by the teacher on reading instruction from grades seven to eleven.

Data of vital importance for curriculum planning was uncovered by this research. The findings of the survey of teaching practices can have a bearing on the direction taken by inservice projects. Also, these findings could exert an influence on the hiring practices of the school boards and the number of university courses in secondary reading instruction available to teachers and prospective teachers.

IV. PROCEDURES

Population

The subjects for this study were all the teachers from grade seven to eleven, inclusive, employed by the Burin Peninsula Integrated and the Burin Peninsula Roman Catholic School Boards. They numbered one hundred and thirty-eight.

Instrumentation

Data on teacher attitudes was obtained through the use of a Teacher Attitude Questionnaire developed by Dahl.⁴ The data on the extent

⁴T. Dahl, "A Survey of the Attitudes of Teachers Toward Reading Instruction in Ontario Secondary Schools," (unpublished Masters Thesis, The University of British Columbia, Vancouver, 1970), pp. 35-48.

of use of teaching practices relating to secondary school reading instruction was gathered by an instrument constructed by the investigator. Both of these instruments appear in the research booklet in Appendix D of this thesis.

Analysis

The analysis of data carried out in this study will be fully described in chapters three and four. However, a brief summation of the procedures carried out is as follows.

Dahl's questionnaire contained nine sources of variance which he derived through factor analysis. That is to say it had nine separate groupings of items such as "General Methodology or "Teacher Participation" or "General Theory" each of which contained several items. The Teaching Practices Questionnaire had three logical groupings assigned by the author. That is to say there were three separate categories of items such as "Teacher's Knowledge of the Reading Skills to be Taught" or "Teacher's Knowledge of the Student" each of which contained several items. Analysis was carried out using the nine sources of variance in the Attitude Questionnaire and the three logical groupings in the Teaching Practices Questionnaire. Each of the independent variables was analysed to determine its effect on each of the sources of variance and logical groups. For example, the effect of teaching experience was investigated on each of the nine groupings in the Attitude Questionnaire and on each of the three groupings in the Teaching Practices Questionnaire.

One-way analysis of variance was applied to determine the effect of teaching experience, teaching certificate and the subject area which the teacher was most familiar with, on the subject's performance.

The t-test was used to determine the effect of sex and the number of university accredited courses in secondary reading instruction completed by the teacher upon his performance in the nine sources of variance and three logical groupings.

Finally, the Pearson Product Moment Correlation Coefficient was found between the subject's sum scores on the Attitude Questionnaire and the Teaching Practices Questionnaire.

Also, the results were studied to provide recommendations for curriculum planning.

V. QUESTIONS UNDER INVESTIGATION

This study sought answers to the following questions:

1. Does the average score for each of the nine sources of variance in the Attitude Questionnaire indicate that teachers with higher teaching certificates rate better than those with lower teaching certificates?
2. Does the average score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that teachers with higher teaching certificates rate better than those with lower teaching certificates?
3. Does the average score for each of the nine sources of variance in the Attitude Questionnaire indicate that teachers with greater amounts of teaching experience rate better than those with lesser amounts of teaching experience?
4. Does the average score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that teachers with greater amounts of experience rate better than those with lesser amounts of experience?
5. Does the average score for each of the sources of variance in the Attitude Questionnaire indicate that teachers most familiar with one subject area rate better than those most familiar with other subject areas?
6. Does the average score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that teachers most familiar with one subject area rate better than those most familiar with other subject areas?
7. Does the average score for each of the nine sources of variance

in the Attitude Questionnaire indicate that male teachers rate better than female teachers?

8. Does the average score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that male teachers rate better than female teachers?

9. Does the average score for each of the nine sources of variance in the Attitude Questionnaire indicate that teachers who have had one or more university accredited courses in secondary reading instruction rate better than those with no such courses?

10. Does the average score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that teachers who have had one or more university accredited courses in secondary reading instruction rate better than those with no such courses?

11. What is the correlation between the teachers' sum scores in the Attitude Questionnaire and their sum scores in the Teaching Practices Questionnaire?

VI. DEFINITIONS OF TERMS

Attitudes

The definition of attitude reported by Shaw and Wright was accepted for this study. It states that attitude entails an "existing predisposition to respond to social objects which, in interaction with situational and other dispositional variables, guides and directs the overt behavior of the individual."⁵

Reading Instruction

This term was considered to imply planned instruction towards specific goals relevant to the acquisition of reading skills in specific subject areas.

⁵M. Shaw and J. M. Wright, Scales for the Measurement of Attitudes, (New York: McGraw-Hill Company, 1967), p. 29.

Secondary School Teacher

This study interpreted this term to refer to any person teaching in grades seven to eleven inclusively.

Teacher Certificate

This term was interpreted by this study to refer to the documentation of the degree to which a teacher is professionally qualified by the Registrar of the Newfoundland and Labrador Department of Education.

Teaching Practices

The term was taken to refer to any teaching activity a teacher performs in his class or in preparing for his class.

VII. BASIC ASSUMPTIONS OF THIS STUDY

The most important assumptions underlying the research reported in this study were as follows:

1. Reading instruction in the secondary school constituted an important goal of teachers in all subject areas;
2. The instruments used could adequately measure teacher attitudes and their extent of use of the selected teaching practices;
3. The subjects responded to the questionnaire in a frank and objective manner.

VIII. LIMITATIONS OF THE STUDY

The chief limitation of this study was that it was restricted to a specific area with a view to surveying teacher attitudes and evaluating teaching practices so as to provide guidelines for improving instruction

in reading. Hence, its findings must be restricted to populations judged similar to the one investigated by this work. Another factor which imposed a limitation on this study was the fact that approximately eighty percent of the population responded to the questionnaires.

The Teaching Practices Questionnaire imposed further restrictions on this study. The teaching practices, which it contains, were culled from a careful study of eight well known books on reading instruction from grades seven to eleven (refer to Chapter III, page 41). Its validity was attested to by a panel of experts at Memorial University of Newfoundland. Also, the reliability for this instrument has been determined only by the test retest method (refer to Chapter III, page 44). A further restriction imposed by this instrument is that the three logical groupings into which the items were placed were assigned by the author and not as a result of any objective factor analysis.

Limitations were also imposed by the method of responding to the questionnaires. Both relied solely on highly subjective self-appraisal by the responding teachers. Also, the fact that the Attitude Questionnaire was developed from research conducted on a different population of secondary school teachers presents another restriction. Finally, it was impossible to determine if the response to any item was the result of a subject's teaching experience, qualifications or both.

IX. BRIEF OVERVIEW OF THE THESIS

Chapter One

This chapter provides the background to the study and a statement of the problems. It offers a justification for the study and presents the purposes of the study. Also, it lists the questions under investigation,

the limitations and assumptions of the study and briefly outlines the procedures used.

Chapter Two

This chapter presents a review of the related literature.

Chapter Three

This chapter deals with methodology. It explains the methods and materials used in the study. A description of the population, construction of the questionnaires, their reliability, validity and administration, are presented. Also, the chapter delineates the preliminary treatment of the data.

Chapter Four

This section describes the analysis and interpretation of the data. It contains the questions under investigation, the hypotheses investigated and describes the statistical procedures used to test them.

Chapter Five

This final chapter summarizes the findings and presents conclusions and recommendations.

Appendices

In the appendices are the letters of permission from the school boards concerned, and from Mr. Tom Dahl authorizing the use of his questionnaire. Also contained in this section are a copy of the research booklet which was distributed to the teachers and a table which further describes one of the research instruments.

CHAPTER II

REVIEW OF RELATED LITERATURE

The sheer volume of literature concerning reading instruction in the secondary school forced the author to be discriminating in his choice. Thus, an attempt was made to organize what was selected from the huge mass of related literature according to the following headings: (1) recognition among educators of the need for high school reading programs, (2) theory and practice as they relate to reading instruction in the secondary school, (3) responsibility and consequent importance of the teacher with regard to reading instruction in the secondary school, (4) some examples in support of the case for secondary school reading instruction, (5) some studies revealing the emphasis given reading instruction in the secondary school, (6) the influence and importance of teacher attitude, and (7) some previous attitude surveys.

I. RECOGNITION OF THE NEED AMONG EDUCATORS FOR

HIGH SCHOOL READING PROGRAMS

As early as 1925, in The Twenty-Fourth Yearbook of the National Society for the Study of Education, stress was placed upon the need for high school reading instruction.¹ Following the lead of the National

¹G. M. Whipple (ed.), The Twenty-Fourth Yearbook of the National Society for the Study of Education, Part I (Bloomington, Illinois: Public School Publishing Company, 1925), p. 27.

Society many other prominent educators underlined the necessity for reading instruction beyond the elementary school. In 1940, Strang expressed the view that high school teachers should not only know how to appraise the reading ability of their students but should also be acquainted with the methods and materials available for improving reading efficiency.²

Although there seemed to be little evidence that any secondary school reading instruction programs existed, Gray observed in 1948 that there was a general awareness of the need for such programs.³

In the 1950's, Fay wrote about the importance of reading as a major tool of study, insisting that the student should be taught how to use this tool in specialized fields.⁴ Another writer who endorsed Fay's views was G. Whipple.⁵

During the 1960's, many prominent educators expressed concern about the importance of secondary school reading instruction. Bamman, Hogan and Green rationalized the point that every field of knowledge had its own language and that to succeed in that field one had to know how to read the language.⁶ Agreement with this argument was evident in many

²R. Strang, Problems in the Improvement of Reading in High School and College (Lancaster, Penn.: Science Press Printing Co., 1940), p. 48.

³W. G. Gray, Nature and Scope of a Sound Reading Program (Vol. XLVII of Yearbook for N.S.S.E., ed. N. B. Henry, 1948), pp. 46-48.

⁴L. Fay, "How Can We Develop Reading Study Skills for the Different Curriculum Areas," The Reading Teacher, 6:12, March, 1953.

⁵G. Whipple, "Controversial Issues Relating to Reading in the Curricular Areas," The Reading Teacher, 8:208-211, April, 1955.

⁶H. Bamman, V. Hogan and C. Green, Reading Instruction in the Secondary School (New York: Longman and Greene, 1961), pp. 1-11.

quarters. One of the authors who supported this stand was Grommon, who wrote under the auspices of the National Council of Teachers of English.⁷

The later sixties witnessed more and more educators articulating their concern over reading instruction in the secondary school. Teaching Reading in High School was a collection of essays edited by R. Karlin and published in 1969.⁸ Authors writing in this text stressed the importance of teaching reading in the high school, stated a rationale for it and presented specific suggestions for handling reading instruction in the various areas of the secondary school. Carter and McGinnis, for example, insisted that reading instruction was the responsibility of every subject teacher.⁹ This point of view was upheld by Davis who wrote in the same text.¹⁰

Olsen and Ames edited another collection of essays relating to secondary school reading instruction in 1970.¹¹ This book presented the views of many educators who decried the malaise in secondary school reading

⁷A. H. Grommon, The Education of Teachers of English, The National Council of Teachers of English (New York: Appleton Century Crofts, 1963), p. 385.

⁸R. Karlin (ed.), Teaching Reading in the High School (New York: Bobbs-Merrill and Co., Inc., 1969).

⁹H. L. Carter and D. J. McGinnis, "Some Suggestions Growing Out of an Evaluation of Reading Instruction by Secondary Teachers and Their Students," in R. Karlin (ed.) Teaching Reading in the High School (New York: Bobbs-Merrill and Co., Inc., 1969), pp. 9-13.

¹⁰S. E. Davis, "High School and College Instructors Can't Teach Reading? Nonsense," in R. Karlin (ed.), Teaching Reading in the High School (New York: Bobbs-Merrill and Co., Inc., 1969), pp. 315-331.

¹¹A. W. Olsen and W. S. Ames (ed.), Teaching Reading Skills in the Secondary School (Scranton, Pennsylvania: International Textbook Co., 1970).

instruction and stressed the importance and necessity of being a proficient reader for all the content areas. Two of those educators were Huus and Burnett.¹²

Grob, in an article which appeared in The Journal of Reading, which was originally started to deal with secondary reading, pointed out the importance of reading instruction in the high school. He made his point by contrasting the amount of time it took a good reader to read a social studies assignment well with the much longer amount of time it took a poor reader to read the same assignment.¹³

Prominence was given secondary reading by the International Reading Association when, at their 1972 convention, a special interest group was formed to deal with it. Also, support for this position is provided in the texts of Schick and Schmit; Moores and Massey; Strang and Bracken; Strang, McCullough and Traxler; Herber; Marksheffel; and Bamman, Hogan and Green;¹⁴ which were all published during the last ten years and which all

¹²H. Huus, "Reading," in A. W. Olsen and W. S. Ames (eds.), Teaching Reading Skills in the Secondary School (Scranton, Pennsylvania: International Textbook Co., 1970), pp. 271-275; R. W. Burnett, "Reading in the Secondary School; Issues and Innovations," in A. W. Olsen and W. S. Ames (eds.), Teaching Reading Skills in the Secondary School (Scranton, Pennsylvania: International Textbook Co., 1970), p. 200.

¹³J. A. Grob, "Reading Rate and Study Time Demands on Secondary Students," The Journal of Reading, 13:285-288, January, 1970.

¹⁴G. Schick and B. Schmit, A Guidebook for the Teaching of Reading: Junior High School Through College (Glenview, Illinois: Psychotecnics, 1966); W. Moores and V. Massey, Helping High School Students Read Better (Toronto: Holt, Rhinehart and Winston, 1966); R. Strang, C. McCullough and A. Traxler, The Improvement of Reading (Toronto: McGraw Hill Co., 1967); R. Strang and D. Branken, Making Better Readers (Boston: D. C. Heath and Co., 1957); H. Herber, Teaching Reading in the Content Areas (Englewood Cliffs: Prentice Hall, Inc., 1970); N. Marksheffel, Better Reading in the Secondary School (New York: The Ronald Press Co., 1966); H. Bamman, D. Hogan and C. Green, Reading Instruction in the Secondary School (New York: Longman and Greene, 1961).

provide instruction relevant to the topic of secondary school reading instruction.

II. THEORY AND SUGGESTED PRACTICE OF READING

INSTRUCTION IN THE SECONDARY SCHOOL

The assumption that the child knows all that he needs to know about reading when he leaves the elementary school is invalid. Much has been written in defense of this statement. R. W. Burnett said that Eva and Guy Bond exclaimed, as early as 1941, that no better results could be expected from this procedure than from leaving a vegetable garden to grow by itself without any care once it has been started.¹⁵

This point of view received further elaboration from H. L. Herber who expressed the opinion that secondary education must develop the skills necessary for independent learning.¹⁶ He placed secondary school reading instruction in its proper perspective by saying that its purpose was to help students acquire the skills they need for the adequate study of all materials required in their subjects. Support for this developmental concept of reading instruction was also voiced by Early, who said:

Reading is not a simple process that is mastered once and for all. As the student moves into the organized bodies of knowledge with their own technical terminology, he must to a degree learn to read again. Each special field has its own language and in order to succeed in that field one must learn its language.¹⁷

¹⁵R. W. Burnett, op. cit., pp. 322-328.

¹⁶H. L. Herber, op. cit., pp. 4-5.

¹⁷M. Early, "Reading: In and Out of the English Curriculum," in A. V. Olsen and W. S. Ames (ed.) Teaching Reading Skills in the Secondary School (Scranton, Pennsylvania: International Textbook Co., 1970), p. 242.

The idea that the pupil must be ready to read any subject matter and that it is the responsibility of the school to equip the student with the tools he needs to perform this task is defended by Strang, Sochor, and Tremonti.¹⁸ It is also expressed by Artley as follows:

Since reading is a process and not a subject, it is a fallacy to assume that the responsibility for promoting its continued growth can be turned over to a single division, class or teacher. All teachers, within the context of their teaching area, must develop the competencies that contribute to effective reading.¹⁹

More fuel is added to this argument by Voix, who says: "Often it is the students' ineffective reading and study skills which pose the real handicap to success in school."²⁰

In short, the literature appropriate to the subject shows general agreement that teaching reading to children should not stop when they leave the elementary school. As the child matures, meets new subjects and encounters more involved areas of familiar subjects, he needs to be able to cope with the reading problems presented by those subjects. It follows that the teacher most familiar with the subject area in question is most

¹⁸R. Strang, "Developing Reading Skills in the Content Areas," in A. V. Olsen and W. S. Ames (eds.) Teaching Reading Skills in the Secondary School Content Areas (Pennsylvania: International Textbook Co., 1970), p. 229; E. Sochor, "Readiness and the Development of Reading Ability at All School Levels," in R. Karlin (ed.) Teaching Reading in the High School (New York: Bobbs-Merrill Co., Inc., 1969), pp. 320-325; J. B. Tremonti, "Responsibility of the Secondary School Teacher in the Reading Program," Journal of Developmental Reading, 7:290-306, Spring, 1964.

¹⁹P. G. Voix, Evaluating Reading and Study Skills in the Secondary Classroom (Newark, Delaware: International Reading Association, 1968), p. vii.

²⁰A. S. Artley, "Implementing a Developmental Program on the Secondary Level," in R. Karlin (ed.) Teaching Reading in the High School (New York: Bobbs-Merrill Co., Inc., 1969), p. 396.

aware of the reading demands made by that subject and these demands can best be located within the framework of the particular subject. Thus, it seems natural that someone trained in reading must coordinate and spearhead such a school wide program. However, remedial reading must not be neglected.

The theory of secondary school reading instruction can perhaps be summarized by the eight criteria developed by Dahl for a sound secondary school reading program.²¹

1. Two paramount purposes of high school reading programs are the personal and social development of the student and the development of understandings, attitudes and skills.
2. Reading must be recognized as only one of the many aids to learning and must relate to other forms of learning experience.
3. Reading programs should be school or college wide and should involve the efforts of all staff members, who must acquire an understanding of the reading process and related teaching methods.
4. Reading programs must be sequential or developmental in that they suit the needs of the student as he progresses through school.
5. Flexibility is essential to reading programs. Assignments, curricula and teaching methods must be varied to suit individual needs.
6. Reading programs should provide for a wide range of reading materials to enlarge the student experience.
7. An interesting, stimulating setting should surround reading programs.
8. Continuous appraisal of the reading program is a necessity and should be shared by the whole staff.

²¹T. Dahl, "Survey of the Attitudes of Ontario Secondary School Teachers Toward Reading Instruction" (unpublished Master's thesis, University of British Columbia, 1971), p. 19.

III. THE RESPONSIBILITY AND CONSEQUENT IMPORTANCE OF THE TEACHER
WITH REGARD TO SECONDARY SCHOOL READING INSTRUCTION

If secondary school reading instruction is to be given in the various school subjects, it follows that the individual subject teacher is responsible for it and an important factor in its success. Shores reiterates this by saying that if a given content field has more or less unique reading requirements, the student can best be taught to meet these requirements adequately by a person well acquainted with the materials and requirements of that field.²² Further support for this position was provided in 1958, by Maney, who reported that a generalized reading ability does not exist and that content and purpose dictate the nature of the skills to be employed in reading a particular problem.²³ The teaching of reading is a major goal of the school which, said Niles, does not exist to cram facts into the students' heads, but rather to help them acquire the power to learn by themselves.²⁴ Reading instruction in the content areas concentrates on the skills necessary to read the particular area and hence represents an essential ingredient of the individual's power to learn by himself.

²²J. H. Shores, "Skills Related to the Ability to Read History and Science," in R. Karlin (ed.) Teaching Reading in the High School (New York: Bobbs-Merrill Co., Inc. 1969), p. 396.

²³E. S. Maney, "Literature and Critical Reading in Science," The Journal of Experimental Education, 27:57-64, September, 1958.

²⁴O. S. Niles, "Developing Essential Reading Skills in the English Program," Reading and Inquiry (Newark, Delaware: International Reading Association, 1965), p. 35.

If the teaching of reading in the content areas furnishes children with the ability to read successfully in the various disciplines, then as Fay says, "The teachers' readiness to do his job is as significant as that of the student."²⁵ Hence a sine qua non condition for the success of a reading program is, as Rauch expresses it, "the strengths and weaknesses of the teachers."²⁶ Joyce and Harootaman elaborate further on the importance of the teacher when they say:

The contemporary explosion of knowledge has effectively put an end to the notion that the teacher's primary role is to be a single source of facts and knowledge. It has also made clear on the other hand, that the teacher's knowledge is a more critical element than ever. In a bewildering, fast changing world, knowledge about how to inquire, knowledge of critical ideas and knowledge about how to acquire and handle facts and theories are the important kinds of knowledge to possess.²⁷

The importance of the teacher and the responsibility he has in the secondary school to teach the skills needed to acquire knowledge through reading is more than attested to by the preceding quotation. This fact has also been pointed out by Artley who says that for us to improve reading instruction we must look to improving the teacher rather than await a panacea in the form of materials.²⁸

Further prominence is given the importance of the teacher by the

²⁵ Leo Fay, Reading in the High School (Washington: N.E.A. Association of Classroom Teachers, 1969), p. 13.

²⁶ S. J. Rauch, "A Checklist for the Evaluation of Reading Programs," The Reading Teacher, 21:519-523, March, 1968.

²⁷ B. R. Joyce and B. Harootaman, The Structure of Teaching (Chicago: Science Research Associates, 1967), p. 13.

²⁸ A. S. Artley, "The Teacher Variable in the Teaching of Reading," The Reading Teacher, 23:229-248, December, 1969.

conclusion reached in an experiment conducted by Harris and Morrison.²⁹

The experiment was an attempt to improve the reading of disadvantaged children. These authors concluded that the significant factor in improving reading was the teacher, not a specific method of instruction.

The importance of reading instruction in the secondary school, the responsibility of the teacher in this regard and the important role he plays are convictions held by other prominent educators, such as Dulin, Conant and Squire.³⁰ The responsibility the teacher assumes springs from the importance of the role he plays in secondary reading instruction and the value of such instruction to the pupil.

However, even though every teacher is expected to teach reading, we must bear in mind the distinction made by Karlin between developmental and remedial reading.³¹ Both programs imply developing the reading skills of all pupils to meet reading demands made by all subjects over a number of years. There is a difference in degree between them. Developmental programs assume the students are reading at a satisfactory level but could benefit from extra instruction. Remedial programs involve more intensive work on handicapped readers who are two or more years below their capacity

²⁹A. Harris and C. Morrison, "The CRAFT Project: A Final Report," The Reading Teacher, 22:335-340, January, 1969.

³⁰K. L. Dulin, "Skill Training for All Secondary Teachers," Journal of Reading, 15:109-114, November, 1971; J. B. Conant, Slums and Suburbs (New York: McGraw Hill, Co., 1961), p. 59; J. R. Squire, The National Interest and the Teaching of English (Champaign, Illinois: National Council of Teachers of English, 1961).

³¹R. Karlin, Teaching Reading in the High School (New York: Bobbs-Merrill Co., Inc., 1969).

and consequently require more intensive reading instruction. This is a highly specialized field and should be left to remedial teachers who have undergone appropriate training.

IV. SOME EXAMPLES IN SUPPORT OF THE CASE FOR SECONDARY SCHOOL READING INSTRUCTION

A basic assumption made by this study was that secondary reading instruction is worthwhile. The assumption was based upon the rationale that instruction in the reading skills peculiar to a subject will lead to increased proficiency in that subject. Ulmans demonstrated the existence of reading skills unique to a particular subject area.³² Thus, he implied that the ability to read adequately in one subject area does not of itself guarantee reading competence in other subject areas. Artley took a similar position when he said, "A particular field of knowledge makes demands for reading interpretation which do not duplicate those of other fields."³³ Many studies were found by this researcher to substantiate these opinions and validate the assumption stated at the beginning of this paragraph. Six are given here.

Call and Wiggin reported an experiment utilizing a control group and an experimental group. The control group was taught a unit in Algebra minus instruction in the reading skills appropriate to that subject.³⁴

³²S. Ulmans, New Trends in Reading Instruction (New York: Bureau of Publications, Teachers' College, Columbia University, 1963), pp. 5-6.

³³A. Sterl Artley, "Critical Reading in the Content Areas," Elementary English, 36:129, February, 1959.

³⁴R. J. Call and N. A. Wiggin, "Reading and Mathematics," in A. V. Olsen and W. S. Ames (eds.) Teaching Reading Skills in the Secondary School (Pennsylvania: International Textbook Co., 1970), pp. 321-325.

The experimental group was taught the same unit ~~plus~~ the reading instruction. Both groups were equivalent and the appropriate experimental precautions were taken. The experimental group achieved significantly better than the control group who had not received any instruction in reading skills.

Schiller reported a study which used control and experimental groups to demonstrate that the systematic and functional use of work study skills in the social studies resulted in mastery of skills and promoted a significant improvement in geography achievement.³⁵

In the field of science an experiment was conducted by Severson in 1963.³⁶ She made use of several control and experimental groups to illustrate that reading study skills lead to better achievement in science.

Aukerman studied the effect of reading instruction in conjunction with the study of history.³⁷ He administered various kinds of reading tests to eleventh grade history students and discovered that good history students performed better on the tests than poor history students.

Eighth grade students were investigated by Rudolf.³⁸ She reported

³⁵Sister M. Schiller, "The Effects of the Functional Use of Certain Skills in Seventh Grade Social Studies," Journal of Educational Research, 57:201-203, December, 1963.

³⁶E. E. Severson, "The Teaching of Reading-Study Skills in Biology," The American Biology Teacher, 25:203-204, March, 1963.

³⁷R. G. Aukerman, "The Reading Status of Good and Poor Eleventh Grade American High School Students," Social Education, 11:351-353, December, 1947.

³⁸K. B. Rudolf, "The Effect of Reading Instruction on Achievement in Eighth Grade Social Studies," Contributions to Education No. 945 (New York: Bureau of Publications, Teachers' College, Columbia University, 1949).

that those students who had been given specially prepared materials on certain reading skills showed greater gains in social studies knowledge, study skills and reading comprehension than comparable students who had no such instruction.

Finally, Dalton conducted a study at the University of Missouri.³⁹ The time span of this study was three semesters. It provided further evidence that reading instruction improved academic achievement.

These six examples provide sufficient evidence to support the assumption stated at the beginning of this section that secondary school reading instruction constitutes an important component of instruction in any subject. The statement by Maney constitutes an appropriate conclusion to this section of the report: "A generalized reading ability does not exist. Content and purpose dictate the nature of the skills to be employed in a certain area."⁴⁰ Therefore, each content area demands that its own reading skills be taught.

V. SOME STUDIES REVEALING THE EMPHASIS GIVEN READING

INSTRUCTION IN THE SECONDARY SCHOOL

Despite the existence of a strong theoretical basis for reading instruction in the secondary school, despite the existence of ample evidence suggesting the success of such instruction and despite the recognition among educators of the need for such instruction, few good develop-

³⁹P. Dalton, and others, "The Effect of Reading Improvement on Academic Achievement," Journal of Reading, 9:242-252, 1966.

⁴⁰E. S. Maney, "Literature and Critical Reading in Science," Journal of Experimental Education, 27:59, September, 1958.

mental reading programs exist. Austin and Moores commented on this situation by reporting that teachers feel that they do not have sufficient time to teach everything and, unaware that a dichotomy need not exist, feel it more important to cover content than to teach the reading skills in the content areas.⁴¹

This statement is readily comprehensible in the light of Gunn's finding, who reported in 1969 for the National Council of Teachers of English.⁴² Gunn revealed that 90 percent of the ten thousand American teachers sampled did not feel prepared to teach reading. In the same article it is related that Squire found in 32,580 observed minutes of classroom instruction that English teachers spent 52.2 percent of their time on literature, 13.5 percent on language, 15.7 percent on composition and the remaining 18.6 percent on speech, media education and reading instruction in that order.

Even more depressing are the results of Cawletti's interviews with forty-two mid-west high school staffs in 1961 and 1962.⁴³ He reported that only twenty-seven of the schools had reading programs of which only twelve were developmental and none were very good. Simons did nothing to improve the picture when he reported that a survey of 127 high schools revealed that while two-thirds had reading programs, all lacked depth,

⁴¹M. Austin and C. Moores, The First R (London: The Macmillan Company, 1963).

⁴²M. A. Gunn, "What Does Research in Reading Reveal About Reading and the Teacher of English?" English Journal, 58:368-385, March, 1969.

⁴³G. L. Cawletti, "Reading Improvement Programs in Selected Mid-Western High Schools," The Reading Teacher, 17:36-37, Spring, 1963.

scope and good administration.⁴⁴

In 1968, Artley contributed further to this distressing scene when he reported that:

1. Systematic reading instruction beyond grade six was uncommon.
2. High school programs were extremely limited in that they lacked specific objectives and scope.
3. There were more programs in the junior high school than in the senior high school.
4. There was a marked scarcity of trained teachers and reading supervisors.⁴⁵

Further indications of the dearth of good secondary school reading programs were presented by Bramm and Roehm in 1964.⁴⁶ They concluded that teachers lacked the knowledge of the reading skills pertinent to the content areas with which they were most familiar.

The research indicates that good secondary school reading programs are rare. The words of Harris provide an appropriate conclusion.⁴⁷

There is no substantial evidence, judging from that reviewed by Gray (1960, p. 1126) and that subsequently published, to indicate that the administrations and staffs of the High Schools and Colleges or special field teachers in the elementary school have

⁴⁴J. S. Simons, "Who is Responsible? The Need for Qualified Supervision of the Reading Program," The English Journal, 52:86-88, February, 1963.

⁴⁵A. S. Artley, Trends and Practices in Secondary School Reading: A Review of the Literature (Delaware: International Reading Association, 1968), pp. 107-108.

⁴⁶L. Bramm and A. Roehm, "Subject Area Teacher's Familiarity with Reading Skills," Journal of Developmental Reading, 7:188-196, September, 1964.

⁴⁷T. L. Harris, "The Teaching of Reading," The Encyclopedia of Educational Research (4th ed.), 1969, p. 1087.

realized the full implication of the developmental concept for the organization of reading instruction.

VI. THE INFLUENCE AND IMPORTANCE OF TEACHER ATTITUDES

Attitudes are important because of the way they influence behavior.⁴⁸

If a teacher does not have the proper attitude toward reading instruction in the secondary school, then it is doubtful if his efforts in this regard will be fruitful. Henry reported in 1969 that pupil learning is influenced by a teacher's behavior which is affected by the teacher's attitude.⁴⁹

This matter is given further explication by Palardy, who said:

One can hardly expect a teacher to put full effort into the utilization of a teaching method which he does not consider sound or personally congenial. The latter factor may become a much more important determinant of what happens than differences in the prescribed patterns.⁵⁰

There appears to be ample justification, therefore, for giving useful attention to the attitudes of secondary teachers toward the teaching of reading. Indeed, one of the sine qua non conditions for the implementation of a sound secondary school program is a thorough assessment of the attitude of the teachers concerned toward reading instruction.

VII. SOME PREVIOUS ATTITUDE SURVEYS

The amount of research concerned specifically with teachers'

⁴⁸K. M. Evans, Attitudes and Interests in Education (London: Routledge and Keegan Paul, 1965).

⁴⁹G. H. Henry, "Style of Teaching and Teacher Evaluation," English Journal, 59:921-927, 1970.

⁵⁰J. M. Palardy, "What Teachers Believe: What Children Achieve," The Elementary School Journal, 69:373, April, 1969.

attitudes is limited. There has been little research done on specifically the attitude of secondary school teachers toward reading instruction. However, if the material cited in the section which elaborated examples of secondary school reading programs is any indication, the attitude of teachers is poor. In 1960, Burton felt that the following statements characterized the attitudes of most high school teachers.⁵¹

1. Reading instruction belongs in the elementary school.
2. High school reading programs could be adequately looked after by remedial teachers.
3. The English teacher or the reading specialist was solely responsible for teaching reading.

Eighty-seven teachers were surveyed by Otto concerning their attitude toward reading instruction in 1969.⁵² He used a Likert-type scale and sought to answer questions seeking information on whether reading instruction was going on and whether subject teachers felt responsible for it. He found that most of the respondents recognized the need for such instruction but did not feel capable of doing it. However, he went on to report that they did feel it was their responsibility.

The literature also revealed that teachers were not alone in having a poor attitude toward secondary reading instruction. Kinder conducted a survey of the United States in 1968 and found that only

⁵¹D. L. Burton, "Heads Out of Sand: Secondary Schools Face the Challenge of Reading," Educational Forum, 24:287, March, 1960.

⁵²W. Otto, "Junior and Senior High School Teachers' Attitudes Toward Teaching Reading in the Content Areas," G. Schick and M. May (eds.), The Psychology of Reading Behavior (Wisconsin: National Reading Conference, 1969), p. 49.

twenty-three states required certification of reading personnel.⁵³ Hence, educational administrators were seen not to value the high school reading programs.

In Canada, Dahl reported a lack of research and literature relevant to secondary reading instruction.⁵⁴ He claimed that a report prepared by the Canadian Education Association to describe recent developments in Canadian education made no reference to reading. He went on to assert that in a summary of Developments in Canadian Education prepared by nine provincial departments of education and the Canadian Teachers Federation no reference to secondary reading was made in any province. Finally, he surveyed twenty-five hundred Ontario secondary school teachers and discovered that they were in agreement with the need for high school reading instruction but that they lacked knowledge of the responsibilities involved and the appropriate methodology.

Thus, the findings of the surveys have not revealed a very positive attitude toward reading instruction nor have they revealed much evidence of good secondary school reading instruction.

VIII. SUMMARY

This review of the literature discussed the need for secondary school reading instruction, the recognition of this need by educators in the last forty-seven years and provided several examples of the effectiveness of such instruction. Also, it highlighted the importance and

⁵³R. F. Kinder, "State Certification of Reading Teachers and Specialists," Journal of Reading, 12:9-12, October, 1968.

⁵⁴T. Dahl, op. cit., p. 32.

responsibility of the content area teacher in such a reading program and revealed both an alarming scarcity of good secondary school reading programs and a meagre amount of attempts being made to foster such programs from the researchers on down to the school faculties. Finally, it investigated the importance of teacher attitude, the effect it has on teacher performance and some surveys dealing with attitudes.

In conclusion, the literature illustrated that there is a lot to be said for the importance of the teacher in the success of such a program and for implementing a secondary school reading program by beginning with the teacher. An old latin proverb states: Nemo dat quad non habet (= No one can give what he hasn't got). For this reason, the researcher felt justified in attempting to determine the attitude of the teacher toward secondary school reading, the extent of his use of some widely accepted secondary school reading teaching practices and to analyse the results in the light of several independent variables pertinent to the teacher. This study, therefore, attempted to provide a thorough assessment of the secondary school reading situation from the vantage point of the content area teacher, i.e. how did he feel about it, what was he doing about it. The benefit of such a study, among the other things as outlined in the preceding chapter, rested in the unveiling of clear directions for inservice and preservice education.

CHAPTER III

METHODOLOGY

The burden of describing the method of collecting the data and preparing it for analysis belongs to this chapter. Accordingly, the chapter contains an outline of the research method used, a description of the population studied, and an explanation of the data needed for analysis. In addition to this it presents an explanation of the instrument employed to survey the attitudes of the teachers and the instrument used to ascertain the extent to which the teachers made use of certain teaching practices deemed to be indicative of good secondary school reading instruction.

I. RESEARCH METHOD

The survey method of research was employed in this study. A research booklet, which appears in Appendix D, was compiled by the investigator for distribution to the teachers for the purpose of collecting the data. It contained: (1) an introductory letter to the teacher, (2) a sheet requesting information on the independent variables under consideration in the study, (3) a questionnaire designed to assess the teacher's attitude toward secondary school reading instruction, (4) a questionnaire designed to ascertain the extent to which the teacher made use of certain secondary school reading teaching practices, and (5) an answer sheet.

In most instances the booklet was distributed and the answer sheet was collected by hand. However, in a few instances inaccessibility by

road and the distance involved demanded distribution and collection by mail.

Table I summarizes the distribution and collection of the research booklets. One hundred and thirty-eight booklets were given out. Of these all but fourteen were delivered by hand. One hundred and three of those delivered by hand were collected and six of those delivered by mail were returned. Three of the responses could not be used in the study, as they were not filled out completely by the respondents.

TABLE I
DISTRIBUTION OF RESEARCH BOOKLETS AND
COLLECTION OF ANSWER SHEETS

	By Hand	By Mail	Total
Booklets Delivered	124	14	138
Answer Sheets Collected	103	6	109
Number Incomplete	2	1	3

II. THE POPULATION

The population used in this study consisted of all the active secondary school teachers on the Burin Peninsula. These teachers were employed by the Burin Peninsula Integrated and the Burin Peninsula Roman Catholic School Boards respectively. The total number of secondary school teachers was found, by the researcher, to be one hundred and thirty-eight.

Since 79 percent of the teachers polled had responded it was decided to begin analysis. Another reason for this decision was that, in the eyes of the researcher, it was felt that no more returns would come forward.

III. DATA SOUGHT BY THIS STUDY

The data collected by this study was numerically coded, by anonymous respondents, on the answer sheets. It consisted of the subjects' replies to the items on both questionnaires as well as the facts on the independent variables considered in this study. The entire statistical analysis was done by means of the computer at Memorial University of Newfoundland.

IV. DESCRIPTION OF THE ATTITUDE QUESTIONNAIRE

Origin of the Attitude Questionnaire

The instrument used to gather data on teacher attitudes was developed by Tom Dahl in 1969 and 1970 at the University of British Columbia.¹ The refined questionnaire consisted of twenty-three items all of which were worded positively, although twelve were true and eleven were false. Each item was accompanied by a five point attitude scale as described by Likert.² The scale ranged in ascending order from "strongly disagree" on the extreme left to "strongly agree" on the extreme right.

Dahl refined his instrument on the basis of a pilot study which involved 104 volunteer active secondary school teachers in Vancouver. He analysed the item responses to the questionnaires by factor analysis and by calculating the distribution of responses on the IBM 360 computer at the University of British Columbia. The questionnaire used in the pilot

¹Tom Dahl, "A Survey of the Attitudes of Teachers toward Reading Instruction in Ontario Secondary Schools" (unpublished Master's thesis, The University of British Columbia, 1970), pp. 37-42.

²Ibid., p. 37.

study consisted of forty-two items. On the basis of factor analysis and univariate frequency tables which were done on the thirty-two items relating to theory, methods, and responsibility for secondary school reading instruction, he produced a refined instrument. This instrument appears in the research booklet in Appendix D under the title, "Attitude Survey." This questionnaire consists of twenty-three items relating to: (1) teachers' awareness of the theory of secondary school reading instruction, (2) teachers' methodology in reading instruction, degree of responsibility assumed by the teachers, familiarity with the terminology appropriate to the problem, and realization of the importance of reading instruction in the secondary school.

Reliability

Dahl assessed the internal consistency of the questionnaire by means of the FORTAP computer program which yielded a Hoyt reliability estimate.³ He analysed items one to fifteen in one group and items sixteen to twenty-three in another. The predicted reliability of each part, based upon the investigator's weighing of responses, was as follows:

items 1 to 15	.465	std. error of measurement = 4.05
items 16 to 23	.519	std. error of measurement = 2.68

The program also reweighted responses to maximize internal consistency and gave the following estimates of maximum reliability:

items 1 to 15	.519	std. error of measurement = 2.68
items 16 to 23	.631	std. error of measurement = 2.79

³Ibid., pp. 54-57.

Internal Structure of Questionnaire

The MK:OFACTOR computer program was used to determine the principal components of the questionnaire.⁴ In items one to fifteen 57.04 percent of variance in responses was accounted for by six factors. Table II presents the results of the factor analysis, identifies the relationships of items to factors, and names each of the six sources of variance.

The principal components were identified in items sixteen to twenty-three by using the same program. It was found that 54.17 percent of the variance was accounted for by three factors. Table III presents the factor structure, names the sources of variance, and identifies the relationships of items to factors.⁵

As a check on the stability of the factors within the questionnaire a further factor analysis was conducted by Dahl.⁶ He randomly sorted his 1,661 respondents into two groups of 830 and 831 respectively. In a comparison of the factor analysis applied to each group, distinct similarities involving the first fifteen items were revealed. In fact, for 830 subjects 51.08 percent of the trace accounted for five factors while for 831 subjects 51.14 percent of the trace accounted for five factors. He found that the patterns of correlations between items and factors were the same for both.

The only noteworthy difference between the original analysis and this last one was the extraction of six factors in the previous analysis

⁴Ibid., pp. 57-59.

⁵Ibid., pp. 59-60.

⁶Ibid., p. 61.

TABLE II
RESULTS OF FACTOR ANALYSIS OF RESPONSES TO ITEMS IN
PART B OF THE QUESTIONNAIRE, SHOWING TITLES
ASSIGNED TO SOURCES OF VARIANCE

Source of variance	Percentage of total variance accounted for	Items* with high correlation to the source of variance	Correlation of each item with the source of variance	Title given to each source of variance
I	14.182	4	.600	General methodology
		6	.699	
		7	.622	
II	13.725	1	.742	Specified responsibility
		5	.724	
			.675	
III	8.142	14	.739	General theory
		15	.714	
IV	7.191	12	.716	Specified theory
		13	.725	
V	7.292	10	.791	Specified methodology
		11	.864	
VI	6.513	2	.412	Implied responsibility
		3	.778	
		9	.373	

This table is read as follows: The title "General Methodology" was assigned to source of variance I (or factor I) on the basis of the topic shared by items 4, 6, and 7, for which the coefficients of correlation with source of variance I are .600, .699, and .622 respectively.

*Item numbers correspond to those on the questionnaire.

TABLE III
RESULTS OF FACTOR ANALYSIS OF RESPONSES TO ITEMS IN
PART C OF THE QUESTIONNAIRE, SHOWING TITLES
ASSIGNED TO SOURCES OF VARIANCE

Source of variance	Percentage of total variance accounted for	Items* with high correlation to the source of variance	Correlation of each item with the source of variance	Title given to each source of variance
I	26.566	16	.688	Needs of students
		18	.552	
		20	.795	
		21	.732	
II	15.060	17	.795	Influence of curricula and materials
		19	.608	
III	12.537	22	.871	Teacher participation
		23	.418	

This table is read as follows: The title "Needs of Students" was assigned to source of variance I (or factor I) on the basis of the topic shared by items 16, 18, 20, and 21, for which the coefficients of correlation with source of variance I are .688, .552, .795, and .732 respectively.

*Item numbers correspond to those on the questionnaire.

and only five in the last one. Dahl reports that the apparent instability of items two and nine accounted for the weakness of the sixth factor.

When items sixteen to twenty-three were analysed, they were also found to compare favorably. For 831 subjects 55.01 percent of the trace was extracted by three factors, while for 830 subjects 53.99 percent of the trace was extracted by three factors. The patterns of correlations of items to factors were identical. The results of the factor analysis was found to be identical when it was compared to the one on 1,661 subjects.

Uses of Sources of Variance for Further Analysis

Since the Hoyt estimate of internal consistency produced low coefficients of reliability, Dahl suggested that the nine identifiable sources of variance within the questionnaire would provide a more reasonable basis for analysis than the sums of the raw scores.⁷ The following estimates of reliability were obtained for each of the nine subscales.

General Methodology	$r = .70$
Specified Responsibility	$r = .76$
General Theory	$r = .70$
Specified Theory	$r = .70$
Specified Methodology	$r = .82$
Implied Responsibility	$r = .60$
Needs of Students	$r = .78$
Influence of Curricula and Instruction	$r = .66$
Teacher Participation	$r = .59$

⁷Ibid., p. 62.

The investigator followed Dahl's advice and all analysis of data for the Attitude Questionnaire was carried out using the nine subscales.

In order to use Dahl's subscales several preliminary treatments had to be performed on the data. A computer program was written, with the assistance of Dr. R. K. Crocker at Memorial University, to transform the responses to the true statements on the Attitude Survey so that they could be summed with the responses to the false statements. This procedure enabled the researcher to sum the scores so as to obtain an average score for each subject on each subscale. An appropriate computer program was devised to facilitate this and to obtain a sum score for each subject on the questionnaire.

Table XVIII in Appendix F identifies which items were false and which were positive. Table II and Table III on pages 36 and 37 reveals which items belong to which subscale.

Test-Retest Study Performed on Attitude Questionnaire

In order to obtain a further estimate of reliability, this author performed a pilot study of the Attitude Questionnaire on ten teachers in a St. John's junior high school in 1972. The research booklet was distributed on May 29th and collected the following day. This procedure was repeated on June 13th.

With the assistance of Dr. R. K. Crocker of Memorial University, a standard computer program was used to obtain a correlation coefficient between a subject's performance on the first occasion with his performance on the second occasion. Table IV presents the correlation coefficients for each subject for the Attitude Survey.

TABLE IV
CORRELATION COEFFICIENTS BETWEEN TEN SUBJECTS' PERFORMANCE
ON THE ATTITUDE QUESTIONNAIRE ON TWO
DIFFERENT OCCASIONS

Subject	Correlation Coefficient
1	.892794
2	.857788
3	.906776
4	.956523
5	.492051
6	.877164
7	.831371
8	.730780
9	.712153
10	.914452

V. DESCRIPTION OF TEACHING PRACTICES QUESTIONNAIRE

Origin

This instrument was devised to determine to what extent a teacher was using certain secondary school reading teaching practices. It consisted of twenty positively worded behavioral statements. The subject could respond to each statement by selecting from one of the following responses: (1) forms part of my standard teaching procedure, (2) occasionally forms part of my planned teaching procedure, (3) occasionally forms part of my unplanned teaching procedure, (4) never forms part of my teaching procedure. The responses were arranged in a four point multiple choice type scale. The respondent selected the description which best fitted his use of the teaching practice. A copy of this instrument appears in Appendix D under the title, "Survey of Teaching Practices."

The statements on the questionnaire were selected from a study of the following texts pertinent to secondary school reading instruction:

1. Bamman, H., O. Hogan, and C. Green, Reading Instruction in the Secondary School (Toronto: Longmans Greene and Co., 1961).
2. Herber, H. L., Teaching Reading in the Content Areas (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970).
3. Marksheffel, N. D., Better Reading in the Secondary School (New York: The Ronald Press Co., 1966).
4. Massey, W. J., and V. D. Moore, Helping High School Students to Read Better (Toronto: Holt Rhinehart and Winston, Inc., 1966).
5. Schick, G., and B. Schmidt, A Guidebook for the Teaching of Reading (Glenview, Illinois: Psychotechnics, Inc., 1966).
6. Strang, R., Problems in the Improvement of Reading in High School and College (Lancaster, Pennsylvania: Science Press Printing Co., 1940).
7. Strang, R., and D. Bracken, Making Better Readers (Boston: D. C. Heath and Co., 1957).

8. Strang, R., C. McCullough, and A. Traxler, The Improvement of Reading (Toronto: McGraw Hill Book Co., 1967).

Twenty practices were chosen which were most common to all these authorities. The investigator was guided in his selection by attempting to identify the practices which related most closely to: (1) the teacher's knowledge of the student, (2) the teacher's knowledge of various reading materials, and (3) the teacher's knowledge of the reading skills to be taught. Table V identifies which items fall into each of the logical groupings.

TABLE V
DISTRIBUTION OF ITEMS ON PRACTICE QUESTIONNAIRE
ACCORDING TO THREE LOGICAL GROUPINGS

Logical Grouping	Item Numbers
Teacher's Knowledge of the Student	1,3,6,13,17,18,19
Teacher's Knowledge of Reading Materials	2,4,5,16,20
Teacher's Knowledge of the Reading Skills to be Taught	7,8,9,10,11,12,14,15

The method of establishing validity for this instrument was by submitting it to a panel of three professors of education considered expert in the teaching of reading at the secondary level. These professors, all on the faculty of Memorial University of Newfoundland, were Dr. Ethel Janes, Dr. John Harker and Dr. O. Crocker. There was agreement among these professors that the items on the questionnaire, and indeed the instrument itself, were valid for the purposes of the researcher. However, it was impossible to carry out this validation procedure before administering the question-

naire because binding commitments had been made by the researcher to visit the Burin Peninsula and time did not allow the validation to be carried out previously.

Purpose

The purpose of using the Teaching Practices Questionnaire was to provide an indication, not a definitive statement, of the extent to which secondary school teachers were using teaching practices indicative of good secondary school reading instruction. This indication would be useful in providing a supplementary guideline for analysing the attitude scale as well as indicating possible areas for curriculum development.

For example, if analysis of the survey of practices indicated that teachers were not carrying out the practices and procedures related to knowledge of reading materials or to reading skills to be taught the implications for curriculum improvement would be obvious. Also, the findings of the attitude survey could be supplemented. For instance, if it was discovered that a teacher scored well on items relating to needs of students but poorly on the practice survey items relating to pupil needs, the implication for inservice work would be readily apparent. Analysis of the findings of both questionnaires will shed light on the independent variables under consideration.

Reliability

The reliability for the questionnaire on teaching practices was determined by using the test-retest method. On May 29th, the instrument was administered to a group of ten teachers in a St. John's junior high school. The responses were collected the following day. On June 13th, the procedure was repeated. A standard statistical computer program was

TABLE VI
CORRELATION COEFFICIENTS BETWEEN TEN SUBJECTS' PERFORMANCE
ON THE TEACHING PRACTICES QUESTIONNAIRE ON
TWO DIFFERENT OCCASIONS

Subject	Correlation Coefficient
1	.862845
2	.899995
3	.873102
4	.950000
5	.497938
6	.408886
7	.893934
8	.725719
9	.536402
10	.784433

used to obtain a correlation coefficient between an individual subject's performance on the first occasion with his performance on the second occasion on which he completed the questionnaire. Table VI presents these coefficients for each of the ten subjects.

Preliminary Treatment of Data Obtained by Teaching Practices Questionnaires

In order to analyse the finding of the survey of teaching practices several preliminaries were taken. It was decided by the investigator to analyse this particular data according to the three logical groupings of the statements as explained in Chapter One, in order to make it more comparable to the findings of the Attitude Questionnaire.

To accomplish this several steps had to be taken. First, a computer program was written, with the aid of Dr. R. K. Crocker, to obtain the mean response on each logical grouping by each of the subjects. Also, this program obtained the individual respondent's sum score for the questionnaire on teaching practices.

VI. CONCLUSION

This chapter has described the origin, internal structure and reliability of both instruments used to collect the data. It has also delineated the population and the method of data collection. Finally, this chapter has revealed the preliminary treatment of the data. Now it remains to present the findings of this study to the reader. Thus the reader is referred to the fourth chapter.

CHAPTER IV

ANALYSIS OF DATA

This chapter is concerned with presenting a detailed analysis of the data on teacher attitudes and teacher practices as they relate to reading instruction in the junior and senior high school. The investigator first described the respondents in terms of the independent variables, whose effect on teacher attitudes and teacher practices, this study investigated. Then he provided the answers to the research questions which were concerned with assessing the effect of the independent variables on teacher attitude and teacher practices and with evaluating the correlation between the two. This was done by describing the specific statistical procedures used to test the null hypotheses which were generated from the research questions. A brief summary and conclusion is presented in the final section of this chapter.

I. DESCRIPTION OF RESPONDENTS

The subjects used in this study constituted 79 percent of the active secondary school teachers on the Burin Peninsula in Newfoundland. Several independent variables were examined by the researcher to determine their effect on the teachers' attitudes and use of selected teaching practices associated with secondary school reading instruction. These independent variables were: (1) number of years of teaching experience, (2) the professional qualifications of the teachers as indicated by the

teaching certificate he possessed, (3) the sex of the teacher, (4) the subject area with which the teacher was most familiar, and (5) the number of university accredited semester courses related to secondary school reading instruction possessed by the teacher.

Each independent variable categorized the subjects differently. With regard to teaching experience, the subjects could be described as follows:

<u>Category</u>	<u>Number in each</u>
Less than one year	7
One-two years	14
Two-three years	15
Four-ten years	40
More than ten years	30

With regard to teaching certificate, the subjects could be described as follows:

<u>Category</u>	<u>Number in each</u>
Grade one or less	10
Grade two	25
Grade three	12
Grade four	25
Grade five or more	34

With regard to sex, the subjects could be described as follows:

<u>Category</u>	<u>Number in each</u>
Male	85
Female	21

With regard to the subject area with which the teacher considered himself to be most familiar, the subjects could be described as follows:

<u>Category</u>	<u>Number in each</u>
Math - Science	35
English	27
Social Studies	32
Foreign Language	12

With regard to the number of university accredited courses in secondary school reading instruction possessed by each teacher, the subjects could be divided as follows:

<u>Category</u>	<u>Number in each</u>
None	84
One	17
More than one	5

II. ANSWERS TO THE RESEARCH QUESTIONS

The research questions proposed to assess the effect of the selected independent variables on the teachers' attitudes and use of the twenty teaching practices in connection with secondary school reading instruction as measured by the two questionnaires. In addition, they also aimed at evaluating the relation between teacher attitude toward reading instruction and teacher use of the chosen teaching practices indicative of good secondary school reading instruction. This was achieved by comparing the teachers' performance on the attitude questionnaire with their performance on the teaching practices questionnaire. In answering the research questions the investigator grouped them around the variables whose effect they explored. A final section treated the relationship between teacher attitude and teaching practices.

The Effect of Teacher Certificate

The first two research questions sought to determine the effect of teacher certification on a teacher's performance on the Attitude Questionnaire and on the Teaching Practices Survey. The subjects were divided into the following groups. Thirty-five teachers with grade two certificate or less constituted group one. Group two consisted of thirty-seven teachers, all of whom possessed a grade three or grade four teaching certificate. Group three was made up of thirty-four teachers who possessed teaching certificates of grade five or higher.

Teacher attitude. The effect of teacher certificate on the attitude of the teachers was determined by applying the One Way Analysis of Variance Test to the mean scores of each of the three groups for each of the nine sources of variance in the Attitude Questionnaire. A standard statistical computer program was used to accomplish this. The object of this was to answer research question number one.

Does the average score for each of the nine sources of variance in the Attitude Questionnaire indicate that teachers with higher teaching certificates score higher than teachers with lower teaching certificates?

The following null hypotheses was tested at the .05 level of significance to answer the question.

There is no significant difference among the mean scores of each teacher certificate group for any of the nine sources of variance in the Attitude Questionnaire.

Table VII presents the probabilities, F-ratios, as derived by the Analysis of Variance Test, as well as the mean scores of each of the teacher certificate groups on the nine sources of variance in the Attitude Questionnaire. Since the probability for there being no difference among the mean scores of the teacher certificate groups on any of the nine

TABLE VII

F-RATIOS AND PROBABILITIES DERIVED BY THE ANALYSIS OF VARIANCE
ON THE GROUP MEANS RESPONSES ON EACH OF THE SOURCES OF
VARIANCE IN THE ATTITUDE QUESTIONNAIRE TO DETERMINE
THE EFFECT OF TEACHER CERTIFICATE

Sources of Variance	Items	Group Means			F.	P.
		\bar{x}_1	\bar{x}_2	\bar{x}_3		
General Methodology	4,6,7	3.1657	3.1540	3.0676	0.35	N.S.
Specified Responsibility	1,5,8	3.4286	3.4946	3.4118	0.09	N.S.
General Theory	14,15	3.6286	3.8108	3.7941	0.62	N.S.
Specified Theory	12,13	4.1143	4.2162	4.1912	0.32	N.S.
Specified Methodology	10,11	2.4286	2.4730	2.1765	1.70	N.S.
Implied Responsibility	2,3,9	2.9571	3.0162	3.0882	0.68	N.S.
Needs of Students	16,18,20, 21	4.2143	4.4162	4.1823	2.05	N.S.
Influence of Curricula & Materials	17,19	3.7000	3.8378	3.6471	0.89	N.S.
Teacher Participation	22,23	3.3714	3.6757	3.5588	2.11	N.S.

Level of Significance .05

sources of variance was greater than .05 the null hypothesis was retained. Therefore, the investigator concluded that for this group of teachers, the professional qualifications of the teachers, as indicated by teacher certificate, did not effect a difference in their attitude toward secondary reading instruction, as measured by the Attitude Questionnaire.

Teaching practices. The effect of the teachers' professional qualifications, as indicated by their teaching certificate, on their extent of use of the twenty selected teaching practices was also determined. This was carried out by applying the One Way Analysis of Variance test to the mean score of the teacher certificate groups on each of the three logical groupings in the Teaching Practices Questionnaire. A standard statistical computer program was used to do the test. The following research question was answered.

Does the average score for each of the three logical groupings in Teaching Practices Questionnaire indicate that teachers with higher teaching certificates score higher than those with lower teaching certificates?

To obtain the answer to this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference among the mean scores of each teacher certificate group on any of the three logical groupings in the Teaching Practices Questionnaire.

Table VIII presents the probabilities and F-ratios, as derived by the Analysis of Variance test, as well as the mean scores of each of the teacher certificate groups on the three logical groupings in the Teaching Practices Questionnaire. Since the probability that there was no difference among the group mean scores on all the logical groupings was greater than .05 the null hypothesis was retained. Therefore, the researcher concluded that for this group of teachers, professional qualifications, as indicated

TABLE VIII

F-RATIOS AND PROBABILITIES DERIVED BY THE ANALYSIS OF VARIANCE
ON THE GROUP MEANS RESPONSES ON EACH OF THE LOGICAL GROUPINGS
IN THE TEACHING PRACTICES QUESTIONNAIRE TO DETERMINE
THE EFFECT OF TEACHER CERTIFICATE

Logical Groupings	Items	Group Means			F.	P.
		\bar{x}_1	\bar{x}_2	\bar{x}_3		
Teacher's Knowledge of the Student	1,3,6,13, 17,18,19	2.6371	2.5432	2.8029	1.10	N.S.
Teacher's Knowledge of Reading Materials	2,4,5,16, 20	2.5486	2.6540	2.6235	0.20	N.S.
Teacher's Knowledge of Reading Skills to be Taught	7,8,9,10, 11,12,14, 15	2.0629	2.1270	2.3765	2.41	N.S.

Level of Significance .05

by teacher certificate, did not produce any difference in the teachers' use of the twenty chosen teaching practices indicative of good secondary reading instruction, as measured by the Teaching Practices Questionnaire.

This finding agrees with that on teacher attitude. In both cases, teacher qualifications were not observed to significantly affect teacher attitude and practices.

The Effect of Teaching Experience

The next two research questions sought to determine the effect of teaching experience on teachers' attitudes of teaching practices relative to secondary school reading instruction. Before proceeding to analyse the data in order to answer these questions, the investigator again divided the subjects into three groups. Group one had thirty-six teachers, all of whom had three years' experience or less. Group two had forty teachers who had between four and ten years teaching experience. Thirty teachers, who had more than ten years teaching experience, constituted the third group. To determine the effect of this variable it was decided to compare the mean scores for the groups to see if any were significantly different.

Teacher Attitude. The effect of the amount of teaching experience on a teacher's attitude was determined by applying the One Way Analysis of Variance test to the mean score of each of the teacher experience groups on the nine sources of variance in the Attitude Questionnaire. The test was applied by using a standard statistical computer program. This was done to answer the following research question:

Does the average score for each of the nine sources of variance in the Attitude Questionnaire indicate that teachers with greater amounts of teaching experience rate higher than those with lesser amounts of teaching experience?

To answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference among the mean scores of the teaching experience groups on any of the nine sources of variance in the Attitude Questionnaire.

Table IX presents the probabilities and F-ratios derived by the Analysis of Variance test, as well as the mean scores for each group on the nine sources of variance on the Attitude Questionnaire. Since the probability that the null hypothesis was true was much greater than .05, it had to be retained. Thus, no significant relationship was found to exist between teaching experience and any of the nine sources of variance in the Attitude Questionnaire. In view of this the investigator was forced to conclude that teaching experience had no effect on teachers' attitudes toward secondary school reading instruction as measured by the Attitude Questionnaire.

Teaching practices. The effect of the amount of teaching experience on the extent of use by a teacher of various teaching practices indicative of good secondary school reading instruction was also determined. This was accomplished by applying the One Way Analysis of Variance test to the mean scores for each of the different experience groups on each of the three logical groupings on the Teaching Practices Questionnaire. This was done to answer the following research question.

Does the average score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that teachers with greater amounts of teaching experience rate higher than those with lesser amounts of teaching experience?

In order to acquire an answer to this question the following null hypothesis was tested at the .05 level of significance.

TABLE IX

F-RATIOS AND PROBABILITIES DERIVED BY THE ANALYSIS OF VARIANCE
ON THE GROUP MEANS RESPONSES ON EACH OF THE SOURCES OF
VARIANCE IN THE ATTITUDE QUESTIONNAIRE TO DETERMINE
THE EFFECT OF TEACHER EXPERIENCE

Sources of Variance	Items	Group Means			F.	P.
		\bar{x}_1	\bar{x}_2	\bar{x}_3		
General Methodology	4,6,7	3.1000	3.0975	3.2100	0.47	N.S.
Specified Responsibility	1,5,8	3.5611	3.3725	3.4067	0.51	N.S.
General Theory	14,15	3.7222	3.7750	3.7333	0.50	N.S.
Specified Theory	12,13	4.2500	4.1375	4.1333	0.50	N.S.
Specified Methodology	10,11	2.4444	2.3250	2.3167	0.34	N.S.
Implied Responsibility	2,3,9	2.9305	3.0625	3.0700	1.00	N.S.
Needs of Students	16,18,20, 21	4.3694	4.2325	4.2167	0.86	N.S.
Influence of Curricula & Materials	17,19	3.7500	3.7875	3.6333	0.54	N.S.
Teacher Participation	22,23	3.5000	3.6000	3.5000	0.30	N.S.

Level of Significance .05

There is no significant difference among the mean scores of the teaching experience groups on any of the three logical groupings on the Teaching Practices Questionnaire.

Table X reports the results of testing this hypothesis. It contains the F-ratios and the probabilities derived by the Analysis of Variance as well as the group mean scores for each of the logical groupings. Since the probability that the null hypothesis was true was greater than .05, it had to be retained. Therefore, the investigator concludes that the independent variable, teaching experience, does not affect the teachers' use of several teaching practices indicative of good secondary reading instruction as measured by the Teaching Practices Questionnaire.

This result is in keeping with the findings for the effect of teacher qualification on teacher attitudes toward secondary reading instruction. In both cases the independent variable, teacher experience, was not seen to effect a significant difference in the teachers' attitudes or in their use of the selected teaching practices in connection with secondary school reading instruction, as measured by the Attitude and Teaching Practices Questionnaires.

The Effect of the Subject With Which the Teacher is Most Familiar

Research questions were designed for the purpose of determining the effect of the subject area with which the teacher was most familiar on his attitudes and use of the selected reading teaching practices. Before proceeding to analyse the data as a means of answering these questions, the subjects were broken up into four subject area groups. Thirty-five teachers most familiar with mathematics or science made up group one. Group two consisted of twenty-seven teachers most familiar with English. Thirty-two teachers most familiar with social studies constituted group

TABLE X

F-RATIOS AND PROBABILITIES DERIVED BY THE ANALYSIS OF VARIANCE
ON THE GROUP MEANS RESPONSES ON EACH OF THE LOGICAL GROUPINGS
IN THE TEACHING PRACTICES QUESTIONNAIRE TO DETERMINE
THE EFFECT OF TEACHER EXPERIENCE

Logical Groupings	Items	Group Means			F.	P.
		\bar{x}_1	\bar{x}_2	\bar{x}_3		
Teacher's Knowledge of the Student	1,3,6,13, 17,18,19	2.5361	2.8300	2.5733	1.77	N.S.
Teacher's Knowledge of Reading Materials	2,4,5,16, 20	2.5944	2.7150	2.4867	0.87	N.S.
Teacher's Knowledge of Reading Skills to be Taught	7,8,9,10, 11,12,14, 15	2.1972	2.2775	2.0500	1.11	N.S.

Level of Significance .05

three. The fourth and final group consisted of twelve foreign language teachers. To determine the effect of this variable on attitudes and practices it was decided to compare the mean scores of each subject area group to see if they were significantly different.

Teacher attitude. The effect of the subject area of most familiarity on the teachers' attitude toward secondary school reading instruction was determined by applying the One Way Analysis of Variance test to the mean score of each of the subject area groups on each of the nine sources of variance in the Attitude Questionnaire. A standard computer program was used to apply the test. It was done to answer the following research question.

Does the average score for each of the nine sources of variance in the Attitude Questionnaire indicate that teachers most familiar with one subject area rate higher than teachers most familiar with other subject areas?

To answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference among the mean scores of the groups of teachers most familiar with different subject areas, on any of the nine sources of variance in the Attitude Questionnaire.

Table XI presents the probabilities, F-ratios (derived by the Analysis of Variance test), as well as the mean scores for each group on the nine sources of variance. The test revealed that for all the sources of variance, except the one entitled General Theory, the probability was much higher than the required level of significance that the null hypothesis was true. Thus, for eight sources of variance the null hypothesis was retained and it was shown that the independent variable of subject area did not produce any significant difference in the performances of the four different groups on the Attitude Questionnaire.

TABLE XI

F-RATIOS AND PROBABILITIES DERIVED BY THE ANALYSIS OF VARIANCE
ON THE GROUP MEANS RESPONSES ON EACH OF THE SOURCES OF
VARIANCE IN THE ATTITUDE QUESTIONNAIRE TO DETERMINE
THE EFFECT OF SUBJECT AREA WITH WHICH THE TEACHER
IS MOST FAMILIAR

Sources of Variance	Items	Group Means				F.	P.
		\bar{x}_1	\bar{x}_2	\bar{x}_3	\bar{x}_4		
General Methodology	4,6,7	3.0914	3.1741	3.1094	2.9333	0.91	N.S.
Specified Responsibility	1,5,8	3.4429	3.7037	3.3062	3.2500	1.35	N.S.
General Theory	14,15	3.8429	3.8704	3.7656	3.1250	3.35	.022098
Specified Theory	12,13	4.1714	4.2037	4.0781	4.3750	0.86	N.S.
Specified Methodology	10,11	2.3571	2.4074	2.3594	2.2917	0.94	N.S.
Implied Responsibility	2,3,9	3.0343	3.1259	2.9625	2.8917	0.94	N.S.
Needs of Students	16,18 20,21	4.2371	4.2000	4.3312	4.4000	0.56	N.S.
Influence of Curricula & Materials	17,19	3.5857	3.8333	3.7813	3.7917	0.98	N.S.
Teacher Participation	22,23	3.3571	3.6481	3.6719	3.4583	1.77	N.S.

Level of Significance .05

However, in the case of the source of variance entitled General Theory the probability that the null hypothesis was true was less than .05. In view of this, the null hypothesis was rejected for that source of variance. Thus, it was shown that a difference did exist among the group mean scores on this particular source of variance. Examination of the group mean scores showed the score for the fourth group to be considerably lower than the others. However, the reader must recall that this group was considerably smaller in number than the other groups and that this may have exerted an influence on its score. Nevertheless, the finding remains that a difference among the scores existed on this source of variance. It was revealed, through the mean scores, that the fourth group scored lower than the others on this factor. Thus, the investigator concluded that this independent variable made no difference to the attitudes of teachers on all but one source of variance as measured by the Attitude Questionnaire.

Since this source of variance included only two items on the Attitude Questionnaire and since it was only one of nine sources of variance on the questionnaire, the investigator did not see a valid basis for concluding that this independent variable significantly affected teacher attitudes.

Teaching practices. The effect of the independent variable of the most familiar subject area on the teachers' use of the selected teaching practices indicative of good secondary reading instruction was also evaluated. This was accomplished by applying the One Way Analysis of Variance test to the mean scores of each of the different subject area groups on each of the three logical groupings in the Teaching Practices Question-

naire. This was done to answer the following question.

Does the mean score for each of the three logical groupings in the Teaching Practices Questionnaire indicate that teachers most familiar with certain subject areas rate higher than those most familiar with other subject areas?

In order to answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference among the mean scores of the groups most familiar with different subject areas on any of the three logical groupings in the Teaching Practices Questionnaire.

Table XII reports the results of the Analysis of Variance test. It contains the F-ratios and the probabilities derived by the Analysis of Variance test performed on the group mean scores for each of the logical groupings on the questionnaire. Since the probability that the null hypothesis was true was higher than .05 for two of the logical groupings, Teacher Knowledge of the Student and Teachers' Knowledge of Reading Materials, it was retained for these two groups. Thus, the investigator concluded that the independent variable of subject area effected no significant differences on the groups' scores for these two groupings.

However, for the logical grouping entitled, Teacher' Knowledge of the Reading Skills to be Taught, the null hypothesis was rejected as the probability of its being true was less than .05. For this grouping the investigator observed a difference among the performances of the groups. Examination of the group mean scores revealed that groups two and three scored differently from groups one and four. Hence, the researcher concluded that the independent variable of most familiar subject area effected a difference in the teachers' use of the selected teaching practices indicative of good secondary school reading instruction as measured by the Teaching Practices Questionnaire.

TABLE XII

F-RATIOS AND PROBABILITIES DERIVED BY THE ANALYSIS OF VARIANCE
ON THE GROUP MEANS RESPONSES ON EACH OF THE LOGICAL GROUPINGS
IN THE TEACHING PRACTICES QUESTIONNAIRE TO DETERMINE
THE EFFECT OF SUBJECT AREA WITH WHICH THE TEACHER
IS MOST FAMILIAR

Logical Groupings	Items	Group Means				F.	P.
		\bar{x}_1	\bar{x}_2	\bar{x}_3	\bar{x}_4		
Teacher's Knowledge of the Student	1,3,6, 13,17,18, 19	2.8600	2.5037	2.5656	2.6583	1.42	N.S.
Teacher's Knowledge of Reading Materials	2,4,5, 16,20	2.7829	2.5111	2.4562	2.7333	1.46	N.S.
Teacher's Knowledge of Reading Skills to be Taught	7,8,9, 10,11,12, 14,15	2.3514	2.0370	2.0281	2.4583	2.82	0.042801

Level of Significance .05

The Effect of the Independent Variable Sex

Research questions 7 and 8 were concerned with the effect of the independent variable of sex on teachers' attitudes and use of the selected teaching practices related to secondary school reading instruction. Before analysing the data to determine the effect of sex the subjects were again divided into groups. Group one consisted of twenty-one female teachers, while eighty-five male teachers constituted group two. To determine the effect of the variable a t-test was administered to the group mean score on the nine sources of variance in the Attitude Questionnaire and the three logical groupings in the Teaching Practices Questionnaire, to determine if a significant difference existed between the groups.

Teacher attitude. The effect of sex on teacher attitudes toward secondary school reading instruction was assessed by running a t-test on the groups' mean scores for each of the nine sources of variance in the Attitude Questionnaire. A standard statistical computer program was used to achieve this. The following research question was being answered.

Does the mean score for each of the nine sources of variance on the Attitude Questionnaire indicate that male teachers rate higher than female teachers?

The answer to this question was obtained by testing the following null hypothesis at the .05 level of significance.

There is no significant difference between the group mean score of male and female teachers on the nine sources of variance in the Attitude Questionnaire.

The results of this test appear in Table XIII. In this table are the t-values and t-probabilities for a two-tailed test derived by the t-test, as well as the group mean scores and group standard deviations for each source of variance. Since all the probabilities that the null hypo-

TABLE XIII

STANDARD DEVIATIONS, t-VALUES, t-PROBABILITIES DERIVED BY t-TESTS
ON THE GROUP MEANS RESPONSES ON EACH OF THE SOURCES OF VARIANCE
IN THE ATTITUDE QUESTIONNAIRE TO DETERMINE THE EFFECT OF SEX

Sources of Variance	Items	Group Means		Group S. Dev.		t	P-Two Tail
		\bar{x}_1	\bar{x}_2	S. Dev. 1	S. Dev. 2		
General Methodology	4,6,7	3.32	3.08	0.46	0.54	1.838	N.S.
Specified Responsibility	1,5,8	3.64	3.40	0.80	0.85	1.160	N.S.
General Theory	14,15	3.88	3.71	0.71	0.76	0.917	N.S.
Specified Theory	12,13	4.07	4.20	0.66	0.52	-0.948	N.S.
Specified Methodology	10,11	2.48	2.34	0.76	0.71	0.792	N.S.
Implied Responsibility	2,3,9	3.02	3.02	0.49	0.46	0.044	N.S.
Needs of Students	16,18, 20,21	4.13	4.31	0.52	0.53	-1.351	N.S.
Influence of Curricula & Materials	17,19	3.90	3.69	0.72	0.59	1.427	N.S.
Teacher Participation	22,23	3.40	3.57	0.67	0.62	-1.066	N.S.

Level of Significance .05

thesis was true were higher than .05, the null hypothesis was retained. Thus, the researcher concluded that sex did not produce a significant difference in teachers' attitude toward secondary school reading instruction as measured by the Attitude Questionnaire.

Teaching practices. The effect of sex on teachers' extent of use of the selected teaching practices was also investigated. This was done by applying a t-test on the group mean scores on each of the three logical groupings in the Teaching Practices Questionnaire. A standard statistical computer program was used to accomplish this. The reason for doing this was to attempt to answer the following research question.

Does the mean score for each of the three logical groupings on the Teaching Practices Questionnaire indicate that teachers rate higher than female teachers?

To answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference between the group mean score of male and female teachers on the three logical groupings in the Teaching Practices Questionnaire.

Table XIV reports the results of testing this hypothesis. It contains the probabilities for a two-tailed test and the t-values derived by the t-test, as well as the group mean scores and standard deviations on each of the three logical groupings in the Teaching Practices Questionnaire. Since the probabilities that the null hypothesis was true on all the logical groupings of the Teaching Practices Questionnaire was less than .05, this hypothesis was rejected.

In view of this, the investigator concluded that the independent variable, sex, did effect a significant difference between the groups' mean scores on each of the three logical groupings in the Teaching Practices

TABLE XIV
STANDARD DEVIATIONS, t-VALUES, t-PROBABILITIES DERIVED BY t-TESTS
ON THE GROUP MEANS RESPONSES ON EACH OF THE LOGICAL GROUPINGS
IN THE TEACHING PRACTICES QUESTIONNAIRE

Logical Groupings	Items	Group Means		Group S. Dev.		t	P-Two Tail
		\bar{x}_1	\bar{x}_2	S. Dev. 1	S. Dev. 2		
Teacher's Knowledge of the Student	1,3,6, 13,17,18, 19	2.25	2.76	0.64	0.73	-2.914	.0043651
Teacher's Knowledge of Reading Materials	2,4,5, 16,20	2.14	2.72	0.63	0.69	-3.485	.0007204
Teacher's Knowledge of Reading Skills to be Taught	7,8,9, 10,11,12 14,15	1.74	2.30	0.49	0.61	-3.834	.0002158

Level of Significance .05

Questionnaire. Inspection of the mean score revealed that group one teachers scored better than group two teachers on the Teaching Practices Questionnaire. Thus, it was concluded that sex did affect teachers' use of the selected teaching practices relevant to good secondary school reading instruction.

The Effect of the Number of University Courses in Secondary School Instruction in Reading

Research questions 9 and 10 sought to investigate the effect of the number of university accredited courses in secondary school reading instruction possessed by the teachers on their attitudes and use of the teaching practices related to secondary school reading instruction. In order to analyse the data to determine the effect of this independent variable, the subjects were divided into two groups. Eighty-two teachers who had no courses in secondary school reading instruction made up group one. The remaining twenty-four teachers who had one or more such courses constituted group two. It was decided that to determine the effect of this variable the group mean scores would be compared to see if they were significantly different.

Teacher attitude. To determine the effect of this variable on teacher attitude toward secondary reading instruction, it was decided to compare the groups' mean scores on each of the nine sources of variance in the Attitude Questionnaire. It was decided to run a t-test on the group means to see if they were significantly different. A standard statistical computer program was used to apply the test.

Does the mean score for each of the nine sources of variance on the Attitude Questionnaire indicate that teachers possessing one or more

university accredited courses in secondary school reading instruction rate better than teachers who possess no such courses?

To answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference between the group mean scores on the nine sources of variance in the Attitude Questionnaire.

Table XV presents the results of the t-test which was performed on the group means. It contains the t-values and probabilities derived by the t-test, as well as group mean scores and group standard deviation on each of the nine sources of variance in the Attitude Questionnaire. Since the probability that the null hypothesis was true for all the sources of variance was greater than .05, the null hypothesis had to be retained. Therefore, the investigator assumed that the independent variable in question did not effect a significant difference on the teachers' attitudes towards reading instruction as measured by the Attitude Questionnaire.

Teaching practices. The effect of the number of university accredited courses in secondary reading instruction on the teachers' use of the selected teaching practices was also investigated. To determine this the group mean scores on each of the three logical groupings on the Teaching Practices Questionnaire were compared to see if there was a significant difference between them. This was accomplished by applying a t-test to the group means. A standard statistical computer program was used to do this. The following research question was answered.

Does the mean score for each of the three logical groupings on the Teaching Practices Questionnaire indicate that teachers who have had one or more courses in secondary reading instruction rate better than teachers who have had no such courses?

TABLE XV

STANDARD DEVIATIONS, t-VALUES, t-PROBABILITIES DERIVED BY t-TESTS
ON THE GROUP MEANS RESPONSES ON EACH OF THE SOURCES OF VARIANCE
IN THE ATTITUDE QUESTIONNAIRE TO DETERMINE IF A DIFFERENCE
EXISTS BETWEEN GROUP SCORES DUE TO NUMBER OF COURSES
IN SECONDARY READING INSTRUCTION

Sources of Variance	Items	Group Means		Group S. Dev.		t	P-Two Tail
		\bar{x}_1	\bar{x}_2	S. Dev. 1	S. Dev. 2		
General Methodology	4,6,7	3.11	3.19	0.50	0.61	-0.642	N.S.
Specified Responsibility	1,5,8	3.43	3.51	0.86	0.79	-0.434	N.S.
General Theory	14,15	3.79	3.58	0.74	0.76	1.195	N.S.
Specified Theory	12,13	4.16	4.23	0.55	0.56	-0.545	N.S.
Specified Methodology	10,11	2.38	2.31	0.76	0.59	0.386	N.S.
Implied Responsibility	2,3,9	3.01	3.05	0.48	0.42	-0.408	N.S.
Needs of Students	16,18, 20,21	4.30	4.20	0.52	0.57	0.815	N.S.
Influence of Curricula & Materials	17,19	3.74	3.71	0.60	0.71	0.202	N.S.
Teacher Participation	22,23	3.57	3.42	0.63	0.62	1.056	N.S.

Level of Significance .05

To answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant difference between the mean scores of the groups on any of the logical groupings in the Teaching Practices Questionnaire.

Table XVI presents the results of this test. It contains the t-values and probabilities for a two-tailed test derived by the t-test, as well as the group mean scores and group standard deviation on each of the three logical groupings. The probability that the null hypothesis was true was greater than .05 for the logical grouping entitled Teacher's Knowledge of the Students; thus, it had to be retained for this grouping. Consequently, the investigator concluded that this independent variable did not affect the teaching practices of the teacher on this logical grouping as measured by the Teaching Practices Questionnaire.

However, the null hypothesis was rejected for the other two logical groupings -- Teacher's Knowledge of the Reading Material and Teacher's Knowledge of the Reading Skills to be Taught. The probability of the null hypothesis being true for these logical groupings was .01. Therefore, the investigator concluded that the number of university accredited courses in secondary school reading instruction did affect teachers' use of the practices found in these two logical groupings as measured by the Teaching Practices Questionnaire.

Correlation Between Teachers' Attitudes and Teaching Practices

The last research question sought to determine the relationship between the teachers' attitudes and teachers' use of the selected teaching practices as measured by both instruments. This was accomplished by using a standard statistical computer program to obtain the correlation coeffi-

TABLE XVI

STANDARD DEVIATIONS, t-VALUES, t-PROBABILITIES DERIVED BY t-TESTS
ON THE GROUP MEANS RESPONSES ON EACH OF THE LOGICAL GROUPINGS
IN THE TEACHING PRACTICES QUESTIONNAIRE TO DETERMINE IF A
DIFFERENCE EXISTS BETWEEN GROUP SCORES DUE TO NUMBER
OF COURSES IN SECONDARY READING INSTRUCTION

Logical Groupings	Items	Group Means		Group S. Dev.		t	P-Two Tail
		\bar{x}_1	\bar{x}_2	S. Dev. 1	S. Dev. 2		
Teacher's Knowledge of the Student	1,3,6, 13,17,18, 19	2.73	2.41	0.74	0.71	1.885	N.S.
Teacher's Knowledge of Reading Materials	2,4,5, 16,20	2.71	2.27	0.71	0.62	2.659	.0090600
Teacher's Knowledge of Reading Skills to be Taught	7,8,9, 10,11,12, 14,15	2.27	1.90	0.61	0.63	2.532	.0128217

Level of Significance .05

cient between the subjects' performance on the Attitude Questionnaire and the subjects' performance on the Teaching Practices Questionnaire. This was done to answer the following research question.

What is the correlation between the teachers' performance on the Attitude Questionnaire and their performance on the Teaching Practices Questionnaire?

To answer this question the following null hypothesis was tested at the .05 level of significance.

There is no significant correlation between the teachers' performance on the Attitude Questionnaire and their performance on the Teaching Practices Questionnaire.

Table XVII presents the correlation coefficient and the results of the t-test which was done to determine the significance of the correlation. It also presents the group means and standard deviations. All these statistics were obtained by using a standard computer program.

Since the probability that the null hypothesis was true was greater than .05 it was retained. Thus, the investigator concluded that there was no significant correlation between the teachers' attitudes and teaching practices as measured by the two questionnaires.

Interpretation of Mean Scores on Both Research Instruments

Table XVII also presents the mean score for all the teachers on the Attitude Questionnaire and on the Teaching Practices Questionnaire. Before mentioning either score it would be useful to recall some of the preliminary treatment of data. In order to make the scores additive and thus obtain average scores on the nine sources of variance in the Attitude Questionnaire, the scores on the true statements were transformed to be as if they were scored on false statements. Therefore, when the scores were added a high total score would represent a negative attitude and a

TABLE XVII

STANDARD DEVIATION AND MEAN SCORES FOR EACH QUESTIONNAIRE
PLUS THE CORRELATION COEFFICIENT AND THE PROBABILITY

	Mean Score	S. Dev.		P.
Attitude Questionnaire	80.915085	6.07198	-0.153527	N.S.
Teaching Practices Questionnaire	49.122635	12.740433		

Level of Significance .05

low score would indicate a positive attitude. The maximum score on the Attitude Questionnaire was one hundred and fifteen. The mean score for the group was eighty-one. In view of this, it can be said that the group generally possessed an unsatisfactory attitude toward secondary school reading instruction.

The scores on the Teaching Practices Questionnaire were already additive and average scores could readily be obtained. Again, the nature of the measuring scale dictated that a high score would indicate little use of the selected teaching practices. The highest score which a teacher could receive was eighty. The mean score for the group was forty-nine. This score indicates relatively little use of the selected teaching practices.

Thus, it can be said that the attitude of the group toward secondary reading instruction was poor. Also, the teachers were not using, to a large extent, teaching practices indicative of good reading instruction.

III. CONCLUSION

The intent of this chapter was to present an analysis of the data to the reader. In this chapter was a description of the 106 teachers who contributed the data for this study. They were described in terms of the independent variables whose effect on teacher attitudes and use of teaching practices indicative of good secondary school reading instruction was being evaluated.

The analysis was organized around eleven research questions. Ten of those questions investigated the effect of the independent variables on the teachers' attitudes and the extent of use of the selected teaching practices. The eleventh research question sought to evaluate the relation

between teachers' attitudes toward secondary reading instruction and their use of the selected teaching practices indicative of good reading instruction in the secondary school.

All calculations were done on the computer at Memorial University of Newfoundland. Standard statistical computer programs were used to apply t-tests and One Way Analysis of Variance to the data and to obtain the correlation coefficient, as well as the mean scores. In most cases the subjects were compared on the basis of the average scores obtained on the nine sources of variance in the Attitude Questionnaire and in the three logical groupings on the Teaching Practices Questionnaire. For the evaluation of the correlation coefficient the mean total scores for the groups on both the Attitude Questionnaire and on the Teaching Practices Questionnaire were used. There were eleven null hypotheses tested at .05 level of significance.

When the investigator sought to determine the effect of a teacher's professional qualifications, as reflected by his teaching certificate, on his attitude and use of the selected practices, he found that there was no difference among teachers of varying qualifications. The null hypothesis that there was no significant difference among the mean scores of the different teacher experience groups on the nine sources of variance in the Attitude Questionnaire and the three logical groupings in the Teaching Practices Questionnaire was retained.

The effect of the subject area most familiar to the teacher on his attitudes and teaching practices was also investigated. The null hypothesis that there was no difference among the teachers of different subject areas as regards their attitude toward secondary reading instruction was retained for all but one source of variance on the Attitude Questionnaire.

The null hypothesis to the effect that there was no difference among the teacher grouping on the three logical groupings in the Teaching Practices Questionnaire was retained for all except one grouping which was entitled Teacher's Knowledge of the Reading Skills to be Taught.

When the investigator evaluated the effect of sex on the teachers' attitudes and use of the selected teaching practices, he found that it affected practices but not attitudes. The null hypothesis that there was no difference between the scores of male and female teachers on the Attitude Questionnaire was retained. However, the hypothesis that there was no difference between their use of the selected teaching practices was rejected.

The final independent variable whose effect was inspected was the number of university courses in secondary reading instruction possessed by the teacher. The null hypothesis that there was no difference between those who had such courses and those who had not, on the Attitude Questionnaire, was retained. However, the hypothesis that there was no difference between the various groups on the Teaching Practices Questionnaire was rejected for two of the logical groupings on this questionnaire but retained for the one entitled Teacher's Knowledge of the Student.

Finally, the correlation between a teacher's attitudes and his use of the selected teaching practices was found to be non-significant.

CHAPTER V

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

I. SUMMARY OF PROCEDURES

This study was concerned with the attitudes and the extent of use of selected teaching practices of secondary school teachers in connection with reading instruction.

The study had several specific aims. It sought to evaluate the effect of selected independent variables on teachers' attitudes and use of selected teaching practices in connection with reading instruction in the junior and senior high school. These independent variables were: (1) teaching experience, (2) teacher's professional qualifications, (3) sex of the teacher, (4) the subject area with which the teacher was most familiar, and (5) the number of university accredited courses in secondary reading instruction possessed by the teacher. Besides this, it strove to appraise the relationship between teacher attitude and teacher use of selected teaching practices. Of course, in doing these things, a survey of the attitude of teachers toward secondary school reading instruction and an evaluation of their use of certain teaching practices indicative of good secondary reading instruction, was also accomplished. Finally, it was the intention of the researcher that his findings would reveal some useful data for curriculum planning in the school districts comprising the study's geographic bounds.

The population which this study concerned itself with consisted of the one hundred and thirty-eight secondary school teachers on the Burin Peninsula in Newfoundland and Labrador. Of those teachers, 106 or 79 percent returned usable answers.

Two instruments were used to gather the data on the teachers' attitudes and use of the selected teaching practices. A questionnaire, developed by Dahl, was used to survey the attitudes of the teachers toward reading instruction in the secondary school.¹ Their extent of use of the twenty selected reading teaching practices was appraised by a questionnaire developed by the author.

Standard statistical computer programs were used to analyse the data. One Way Analysis of Variance tests, t-tests as well as the Pearson Product Moment Correlation Coefficient were employed to carry out the analysis. The following null hypotheses were tested at the .05 level in examining the data.

1. There is no significant difference among the mean scores of each teacher certificate group for any of the nine sources of variance in the Attitude Questionnaire.
2. There is no significant difference among the mean scores of each teacher certificate group, for any of the three logical groupings in the Teaching Practices Questionnaire.
3. There is no significant difference among the mean scores of the teaching experience groups in any of the nine sources of variance in the Attitude Questionnaire.
4. There is no significant difference among the mean scores of the teaching experience groups on any of the three logical groupings in the Teaching Practices Questionnaire.

¹T. Dahl, "A Survey of the Attitudes of Teachers Toward Reading Instruction in Ontario Secondary Schools" (unpublished Master's thesis, University of British Columbia, Vancouver, 1970), pp. 35-41.

5. There is no significant difference among the mean scores of the groups of teachers most familiar with different subject areas on any of the nine sources of variance in the Attitude Questionnaire.

6. There is no significant difference among the mean scores of the groups most familiar with different subject areas, on any of the three logical groupings in the Teaching Practices Questionnaire.

7. There is no significant difference between the mean scores of the male and female group of teachers on any of the nine sources of variance in the Attitude Questionnaire.

8. There is no significant difference between the mean scores of the male and female group of teachers on any of the three logical groupings in the Teaching Practices Questionnaire.

9. There is no significant difference between the group mean scores in the nine sources of variance in the Attitude Questionnaire of the teachers with university courses in secondary school reading instruction and those without courses in secondary school reading instruction.

10. There is no significant difference between the group mean scores in the three logical groupings in the Teaching Practices Questionnaire of the teachers with university courses in secondary reading instruction and those without courses in secondary reading instruction.

11. There is no significant correlation between the teachers' performance on the Attitude Questionnaire and their performance on the Teaching Practices Questionnaire.

II. SUMMARY OF THE FINDINGS

Hypothesis Number One

The purpose of this hypothesis was to determine if a teacher's professional qualifications, as measured by his teaching certificate, affected his attitude toward reading instruction. The One Way Analysis of Variance Test was administered to the mean scores of the different teacher certificate groups on each of the nine sources of variance in the Attitude Questionnaire to ascertain whether a significant difference existed among the scores of the different groups. The test reported a high probability that there was not any significant difference among the

scores of the teacher certificate groups. Thus, the hypothesis was retained and the investigator found that for this population of secondary school teachers, as measured by the Attitude Questionnaire, a teacher's professional qualifications did not affect his attitude toward reading instruction.

Hypothesis Number Two

The purpose of this hypothesis was to determine if a teacher's professional qualifications, as measured by his teaching certificate, affected his teaching practices in relation to reading instruction from grades seven to eleven. The One Way Analysis of Variance Test was administered to the mean scores of the different teacher certificate groups on each of the three logical groupings in the Teaching Practices Questionnaire to ascertain whether a significant difference existed among the scores. The test reported a high probability that there was not any significant difference among the scores of the teacher certificate groups. Thus, the hypothesis was retained and the investigator found that, for this population of secondary school teachers as measured by the Teaching Practices Questionnaire, a teacher's professional qualifications did not affect his teaching practices.

Hypothesis Number Three

The purpose of this hypothesis was to determine if the amount of teaching experience possessed by a teacher affected his attitude toward reading instruction. The One Way Analysis of Variance Test was administered to the mean scores of the different teaching experience groups on each of the nine sources of variance in the Attitude Questionnaire to ascertain whether a significant difference existed among the scores. The

test reported a high probability that there was not a significant difference among the scores of the teaching experience groups. Therefore, the hypothesis was retained and the investigator found that, for this population of secondary school teachers as measured by the Attitude Questionnaire, a teacher's years of teaching experience did not affect his attitude toward reading instruction.

Hypothesis Number Four

The purpose of this hypothesis was to determine if the amount of teaching experience possessed by a teacher affected his teaching practices in relation to reading instruction from grades seven to eleven. The One Way Analysis of Variance Test was administered to the mean scores of the different teaching experience groups on each of the three logical groupings in the Teaching Practices Questionnaire to ascertain whether a significant difference existed among the scores. The test reported a high probability that there was not a significant difference among the scores of the teaching experience groups. Therefore, the hypothesis was retained and the investigator found that, for this population of secondary school teachers as measured by the Teaching Practices Questionnaire, the number of years teaching experience which a teacher possessed did not affect his teaching practices.

Hypothesis Number Five

The purpose of this hypothesis was to determine if the subject area with which a teacher was most familiar affected his attitude toward reading instruction. The One Way Analysis of Variance Test was administered to the mean scores of the different subject area groups on each of the nine sources of variance in the Attitude Questionnaire to ascertain

whether a significant difference existed among the scores. The test reported a high probability that there was not a significant difference among the scores for eight of the sources of variance. Therefore, the hypothesis was retained for eight of the sources of variance. The investigator found that, for this population of secondary school teachers, the subject area which a teacher was most familiar with did not affect his attitude toward reading instruction on eight of the sources of variance in the Attitude Questionnaire.

However, on one of the sources of variance entitled "General Theory," the hypothesis was rejected. Here the investigator found the probability that there was no difference among the scores of the groups to be lower than the level of significance. Examination of the group mean scores found the fourth group to be considerably lower than the others. Nevertheless, the investigator had reservations about this finding due to two facts. One fact was that the fourth group was very much smaller than the other groups. The other fact was that there was no difference among the group scores on any of the other sources of variance which included twenty-one of the twenty-three items.

Hypothesis Number Six

The purpose of this hypothesis was to determine if the subject area with which the teacher was most familiar affected his reading teaching practices in the secondary school. The One Way Analysis of Variance Test was administered to the mean scores of the different subject area groups on each of the three logical groupings in the Teaching Practices Questionnaire to ascertain whether a significant difference existed among the scores. The test reported a high probability that there was not a signi-

ficant difference among the mean scores of the subject area groups on the two logical groupings entitled "Teacher's Knowledge of the Student" and "Teacher's Knowledge of the Reading Materials." Therefore, the hypothesis was retained for these two logical groupings. The investigator found for this population of secondary school teachers, as measured by the Teaching Practices Questionnaire, that the subject area with which the teacher was most familiar did not affect his attitude toward reading instruction on two of the logical groupings in the questionnaire.

However, on one of the logical groupings which was entitled "Teacher's Knowledge of the Reading Skills to be Taught," the hypothesis was rejected. Examination of the group mean scores revealed that two of the groups, English and Social Studies, scored differently from the other two groups, Math-Science and Foreign Language. The investigator discovered that the teachers in these groups scored better on this logical grouping than did the other two groups. Hence, he found that the subject area with which the teacher was most familiar affected the reading teaching practices in the secondary school under the logical grouping of "Teacher's Knowledge of the Reading Skills to be Taught." Of course, this applies only to the population of teachers measured by the Teaching Practices Questionnaire.

Hypothesis Number Seven

The purpose of this hypothesis was to determine if the sex of a teacher affected his attitude toward reading instruction. The t-test was administered to the mean scores of each sex group on the nine sources of variance in the Attitude Questionnaire to ascertain whether a significant difference existed among the scores. The test reported a high probability that there was no significant difference among the scores of the groups.

Therefore, the investigator retained the hypothesis and found that, for the population of teachers measured by the Attitude Questionnaire, sex did not affect their attitudes toward reading instruction in the junior and senior high school.

Hypothesis Number Eight

The purpose of this hypothesis was to determine if the sex of a teacher affected his teaching practices in relation to reading instruction in grades seven to eleven. The t-test was administered to the mean scores of the sex groups on the three logical groupings in the Teaching Practices Questionnaire to ascertain whether there was a significant difference between the scores. The test reported a low probability that there was not a significant difference between the scores. Therefore, the hypothesis was rejected. The investigator found that female teachers scored better than the male teachers on all three logical groupings in the questionnaire. Consequently, he reported that for the population of teachers measured by the Teaching Practices Questionnaire, sex affected their teaching practices in connection with reading instruction in the secondary school.

Hypothesis Number Nine

The purpose of this hypothesis was to determine if the number of university courses in secondary school reading instruction completed by a teacher affected his attitude toward reading instruction. The t-test was administered to the mean scores of the teacher groups on each of the nine sources of variance in the Attitude Questionnaire to ascertain whether a significant difference existed among the scores. The test reported a high probability that there was no significant difference among the mean scores. Therefore, the investigator retained the hypothesis and concluded that the

number of university courses in reading instruction for the secondary school did not affect the teachers' attitudes towards reading instruction in the population of teachers measured by the questionnaire.

Hypothesis Number Ten

The purpose of this hypothesis was to determine the effect of the number of university courses in secondary school reading instruction completed by the teacher on a teacher's teaching practices in connection with reading instruction in the junior and senior high school. The t-test was administered to the mean scores of the teacher groups on each of the three logical groupings in the Teaching Practices Questionnaire to ascertain whether a significant difference existed among the scores. The test reported that for the logical grouping entitled "Teacher's Knowledge of the Student," the probability was high that there was no significant difference among the scores. Therefore, for this logical grouping the investigator retained the hypothesis and concluded that the number of university courses in secondary school reading instruction did not affect teaching practices.

However, this was not the case for the logical groupings entitled "Teacher's Knowledge of the Reading Materials" and "Teacher's Knowledge of the Reading Skills to be Taught." For these groupings the test reported that the probability was low that no significant difference existed among the scores. Therefore, the investigator rejected the hypothesis for these groupings. He found that, for the population of teachers measured by the Teaching Practices Questionnaire, the number of university courses in reading instruction for the secondary school affected their teaching practices. Upon close examination of the mean scores, it was discovered that

those teachers who possessed one or more university courses in reading instruction for the secondary school scored better than those who had completed no such courses.

Hypothesis Number Eleven

The purpose of this hypothesis was to determine whether a significant correlation existed between teachers' attitudes and teaching practices. A Pearson Product Moment Correlation Coefficient was found between the teachers' scores on the Attitude Questionnaire and their scores on the Teaching Practices Questionnaire. A low negative correlation of 0.153527 was obtained. The probability that this correlation was not significant was high, so the hypothesis was retained. Therefore, the investigator found that, for the population of teachers measured by the two questionnaires, there was no significant correlation between their attitudes and teaching practices in connection with reading instruction in the junior and senior high school.

Results of the Attitude Questionnaire

To assess the attitude of teachers toward reading instruction from grades seven to eleven a mean total score on the Attitude Questionnaire was obtained from all the subjects' scores. This score, 80.915, was out of 115. There was a standard deviation of six. However, due to the data transformation, the higher scores indicated poor attitudes. Therefore, the investigator found that, for the population of teachers measured by the Attitude Questionnaire, their attitudes toward reading instruction beyond the elementary school was unsatisfactory.

Results of the Teaching Practices Questionnaire

In order to determine the extent of use given the selected reading

teaching practices by the teachers, a mean total score on the Teaching Practices Questionnaire was obtained from all the subjects' scores. Here, a high score indicated unsatisfactory usage. The highest possible score was eighty and the lowest possible was twenty. The mean score was 49.122 with a standard deviation of 12.740. These figures indicated an unsatisfactory use of the teaching practices indicative of good reading instruction in the secondary school for a large number of teachers. However, since this is a mean score with a fairly high standard deviation, some of the teachers performed considerably better than the score indicates.

III. CONCLUSIONS

Before reading the following conclusions the reader is reminded of the fact that the findings, from which these conclusions come, were the results of a study involving all the secondary school teachers on the Burin Peninsula in Newfoundland and Labrador. Hence, generalizations from the conclusions must be limited to populations of teachers judged to be similar to the one used in this study.

1. The attitude of the teachers toward reading instruction in the junior and senior high school was found to be unsatisfactory.

2. The extent to which the teachers used the selected teaching practices was also found to be generally unsatisfactory. However, since there was a fairly high standard deviation among the scores, some of the teachers undoubtedly used the selected practices to a suitable degree.

3. The teacher's professional qualifications, as indicated by his teaching certificate, did not affect attitudes towards reading instruction in the secondary school.

4. The teacher's professional qualifications, as indicated by his

teaching certificate, did not affect his use of the selected teaching practices in connection with reading instruction in the secondary school.

5. The number of years of teaching experience possessed by a teacher did not affect his attitude toward reading instruction in the junior and senior high school.

6. The number of years teaching experience possessed by a teacher did not affect his use of the selected teaching practices in connection with reading instruction in the secondary school.

7. The subject area with which the teacher was most familiar did not affect his attitude toward reading instruction in grades seven to eleven.

8. The subject area with which the teacher was most familiar did not affect his use of the selected teaching practices under the headings "Teacher's Knowledge of the Student" and "Teacher's Knowledge of the Reading Materials." However, for the practices under the heading "Teacher's Knowledge of the Reading Skills to be Taught," this variable did have some effect. In this case, teachers most familiar with English and social studies made more use of the selected practices than teachers most familiar with mathematics, science and foreign language.

9. The sex of the teachers had no affect on teacher attitudes towards reading instruction in the secondary school.

10. The sex of the teachers did affect their use of the selected teaching practices in connection with reading instruction in the secondary school. Female teachers made more use of the selected teaching practices than male teachers.

11. The number of university courses in secondary school reading instruction completed by a teacher did not affect his attitude toward

reading instruction beyond grade six.

12. The number of university courses in secondary school reading instruction completed by a teacher did not affect his use of the teaching practices under the heading "Teacher's Knowledge of the Student." However, for the practices under the headings "Teacher's Knowledge of the Reading Materials" and "Teacher's Knowledge of the Reading Skills to be Taught," the opposite was the case. Here, teachers with one or more such university courses made more use of the selected teaching practices in connection with reading instruction in the junior and senior high school.

IV. RECOMMENDATIONS

Having considered the findings of this study, the investigator made the following recommendations concerning the attitudes and teaching practices of the teachers pertaining to reading instruction beyond the elementary school. These recommendations assumed that reading instruction in the junior and senior high school is a goal of the school. Also, they assumed that the educational teachers in the school district are interested in reaching that goal.

1. A systematic approach to this problem should be worked out in the school district.

2. In the absence of a reading specialist the English teachers in each school should be responsible for coordinating with other teachers a reading program in grades seven to eleven.

3. Steps should be taken so that the various subject area teachers recognize their responsibility and role in giving reading instruction beyond the elementary school.

4. A professional library of teacher resources for reading

instruction in the secondary school should be established in each school. If this is impossible, a regional one should be accessible to the teachers. Some of the materials which this library might contain are presented in the following list. The reader is reminded that what follows is only a partial list of resource books and periodicals.

i. G. Schick and B. Schmidt, A Guidebook for the Teaching of Reading: Junior High School Through College (Glenview, Illinois: Psychotechnics, 1966).

ii. W. Moores and V. Massey, Helping High School Students Read Better (Toronto: Holt, Rhinehart and Winston, 1966).

iii. R. Strang, C. McCullough and A. Traxler, The Improvement of Reading (Toronto: McGraw Hill Co., 1967).

iv. R. Strang and D. Bracken, Making Better Readers (Boston: D. C. Heath and Co., 1957).

v. H. Herber, Teaching Reading in the Content Areas (Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970).

vi. N. Marksheffel, Better Reading in the Secondary School (New York: The Ronald Press Co., 1966).

vii. H. Bamman, D. Hogan and C. Greene, Reading Instruction in the Secondary School (New York: David McKay Co., Inc., 1967).

viii. E. Aukerman, Reading in the Secondary School Classroom (Toronto: McGraw Hill Co., 1972).

ix. P. Leedy, Read with Speed and Precision (Toronto: McGraw Hill Book Co., 1963).

x. F. P. Robinson, Effective Reading (New York: Harper and Brothers Publishers, 1962).

xi. A subscription to The Reading Teacher and/or The Journal of Reading. This is available from the International Reading Association, Six Tyre Avenue, Newark, Delaware. 19711.

5. The teachers should be encouraged to take any available courses pertaining to reading instruction beyond the elementary school.

6. A record of the students' performance on standardized intelligence and reading tests should be available to the teachers. The teachers

should be encouraged to become familiar with this record as it applies to their classes.

7. Before hiring new teachers, their pre-service training should be examined to determine if they are theoretically equipped to participate in a reading program for the junior and senior high school. Also, they should have the proper attitude toward reading instruction in the secondary school.

8. The use of consultative services is recommended in planning a sound reading program for the secondary school.

V. RECOMMENDATIONS FOR FURTHER RESEARCH

The findings of this study suggest a number of recommendations regarding further investigation of the problems related to reading and the secondary level.

1. Since this study was confined to a single locality, the researcher recommends that similar studies be conducted in other localities or on a provincial basis. This would provide more information on the variables which influence teacher attitudes and practices in reading instruction from grades seven to eleven. Also, since the findings of this study are only as valid and reliable as the instrumentation and methodology employed, such research would verify these findings and provide a useful basis for refining the instruments.

2. As the findings of this study revealed and as a review of the literature demonstrated, much study is needed in the field of reading instruction in the secondary school. The writer recommends that educators undertake more research into the nature, scope and effectiveness of current reading programs in other provincial areas. He also suggests that these

studies should seek to provide information useful for planning curriculum improvements in the local districts.

3. The investigator also recommends, and as the findings of this study imply, that educators must carry out more research into the nature and effectiveness of teacher training in reading education.

4. The writer was also puzzled over some of the findings of this study. In particular, he was intrigued over the non-effect of a teacher's professional qualifications and experience upon his attitudes and teaching practices. Also, he was puzzled over the effect of sex upon teaching practices. He, therefore, recommends further investigation into these phenomena for the purposes of verification and explanation.

BIBLIOGRAPHY

A. BOOKS

- Artley, A. S. Trends and Practices in Secondary School Reading: A Review of the Literature. Newark, Delaware: International Reading Association, 1968.
- Austin, M., and C. Morrison. The First R. London: Cambridge University Press, 1963.
- Bamman, H., V. Hogan, and C. Greene. Reading Instruction in the Secondary School. New York: Longman's, Greene and Co., 1961.
- Conant, J. B. Slums and Suburbs. New York: McGraw Hill Co., 1961.
- Ebel, E. (ed.). Encyclopedia of Educational Research. New York: Macmillan Co., 1969.
- Evans, K. Attitudes and Interests in Education. London: Routledge and Keegan Paul, 1965.
- Fay, L. Reading in the High School. Washington: The National Association of Classroom Teachers, 1969.
- Grommon, A. (ed.). The Education of Teachers of English. New York: Appleton-Century-Crofts, 1963.
- Henry, N. B. (ed.). Adult Reading, The Fifty-Fifth Yearbook of the National Society for the Study of Education, Part II. Chicago, Illinois: University of Chicago Press, 1956.
- _____. Reading in High School and College, Forty-Seventh Yearbook of the National Society for the Study of Education. Chicago, Illinois: University of Chicago Press, 1940.
- Herber, H. Teaching Reading in the Content Areas. Englewood Cliffs, New Jersey: Prentice Hall, Inc., 1970.
- Joyce, B., and B. Harootman. The Structure of Teaching. Chicago: Science Research Associates, 1967.
- Karlin, R. (ed.). Teaching Reading in the High School. New York: Bobbs-Merrill, Inc., 1969.

- Marksheffel, N. Better Reading in the Secondary School. New York: The Ronald Press Co., 1966.
- Massey, V., and W. Moores. Helping High School Students Read Better. Toronto: Holt, Rhinehart and Winston, 1966.
- Olson, A., and W. Ames (eds.). Teaching Reading Skills in the Secondary School. Pennsylvania: International Textbook Co., 1970.
- Schick, B., and B. Schmidt. A Guidebook for the Teaching of Reading. Glenview, Illinois: Psychotecnics, 1966.
- Schick, G., and M. May (eds.). The Psychology of Reading Behavior, The Eighteenth Yearbook of the National Reading Conference. Milwaukee, Wisconsin: The National Reading Conference, Inc., 1969.
- Shaw, M., and J. Wright. Scales for the Measurement of Attitudes. New York: McGraw Hill Co., 1967.
- Squire, J. The National Interest and the Teaching of English. Champaign, Illinois: National Council of Teachers of English, 1961.
- Strang, R. Problems in the Improvement of Reading: High School and College. Lancaster, Pennsylvania: Science Press, 1940.
- Strang, R., and D. Bracken. Making Better Readers. Boston: D. C. Heath and Co., 1951.
- Strang, R., C. McCullough, and A. Traxler. The Improvement of Reading. Toronto: McGraw Hill Co., 1967.
- Uuans, S. New Trends in Reading Instruction. Teachers' College, Columbia University, New York: Bureau of Publications, 1963.
- Voix, R. Evaluating Reading and Study Skills in the Secondary Classroom. Newark, Delaware: International Reading Association, 1968.
- Wallen, N., and R. Travers. Analysis and Interaction of Teaching Methods, Handbook of Research Association, New York: The Macmillan Co., 1963.
- Whipple, G. Twenty-Fourth Yearbook of the National Society for the Study of Education, Part I. Chicago, Illinois: Public School Publishing Co., 1925.

B. BOOKS: PARTS OF SERIES

- Rudolf, K. B. The Effect of Reading Instruction on Achievement in Eighth Grade Social Studies. Contributions to Education, No. 945, New York: Teachers' College, Columbia University: Bureau of Publications, 1949.

C. PERIODICALS

- Artley, A. "Critical Reading in the Content Areas," Elementary English, XXXVI (February, 1959), 122-130.
- _____. "The Teacher Variable in the Teaching of Reading," The Reading Teacher, XXIII (December, 1969), 239-248.
- Aukeman, R. "Reading Status of Good and Poor Eleventh Grade American High School Students," Social Education, XI (December, 1947), 351-353.
- Brahm, L., and A. Roehms. "Subject Area Teachers' Familiarity with Reading Skills," Journal of Developmental Reading, VII (September, 1964), 188-196.
- Burton, D. "Heads Out of Sand," Educational Forum, XXIV (March, 1960), 285-293.
- Cawletti, G. "Reading Improvement Programs in Selected Mid West High Schools," Reading Teacher, XVII (September, 1963), 36-37.
- Dalton, P. "The Effects of Reading Improvement on Academic Achievement," Journal of Reading, IX (March, 1966), 242-252.
- Dulen, K. "Skill Training for All Secondary Teachers," Journal of Reading, XV (November, 1971), 109-114.
- Fay, L. "How Can We Develop Reading Study Skills for the Different Curriculum Areas," Reading Teacher, VI (March, 1953), 12.
- Grob, J. "Reading Rate and Study Time Demands on Secondary Students," Journal of Reading, XIII (January, 1970), 285-288.
- Gunn, M. "Research in Reading and the Teacher of English," English Journal, LVIII (March, 1969), 368-385.
- Harris, A., and C. Morrison. "The CRAFT Project," Reading Teacher, XXII (January, 1969), 335-340.
- Henry, G. "Style of Teaching and Teacher Evaluation," English Journal, LIX (October, 1970), 921-927.
- Kinder, R. "State Certification of Reading Teachers and Specialists," Journal of Reading, XII (October, 1968), 9-12.
- Maney, E. "Literature and Critical Reading in Science," Journal of Experimental Education, XXVII (September, 1958), 57-64.
- Palardy, J. "What Teachers Believe," Elementary School Journal, LXIX (April, 1969), 370-374.

Rauch, S. "A Checklist for the Evaluation of Reading Programs," Reading Teacher, XXI (March, 1968), 519-523.

Schiller, M. "The Effects of the Functional Use of Certain Skills in Seventh Grade Social Studies," Journal of Educational Research, LVII (December, 1963), 201-203.

Severson, E. "The Teaching of Reading Study Skills in Biology," The American Biology Teacher, XXV (December, 1963), 203-208.

Simmons, J. "Who Is Responsible?" English Journal, LII (February, 1963), 86-88.

Tremonti, J. "Responsibility of the Secondary School Teacher in the Reading Program," Journal of Developmental Reading, VII (Summer, 1964), 290-306.

Whipple, G. "Controversial Issues Relating to Reading in the Curricular Areas," Reading Teacher, VIII (April, 1955), 208-211.

D. UNPUBLISHED MATERIALS

Dahl, T. "A Survey of Attitudes of Ontario Secondary School Teachers Toward Reading Instruction." Unpublished Master's thesis, The University of British Columbia, Vancouver, British Columbia, 1971.

APPENDIX A

LETTER FROM MARYSTOWN REGIONAL HIGH SCHOOL

NOV 22 1971

Marystown Regional High School

Marystown, Placentia Bay

Newfoundland

November 18, 1971

Dr. G. Murphy, Head
Dept. of Curriculum and Instruction
Faculty of Education
Memorial University of Newfoundland
St. John's, Newfoundland

Dear Dr. Murphy:

We, at this school, are very interested in having testing programs conducted with our students. As these testing programs are not available to us or we do not have the personnel to administer them, we have a number of proposals to make to you and to your graduate students.

(1) If your department or your graduate students are conducting any testing program that requires qualified people to administer and to mark, we would be delighted to accomodate them at their convenience.

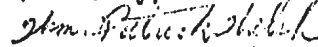
(2) If your department or your graduate students are conducting a testing program that we can administer, we will gladly co-operate in administering them and in returning the papers for marking, etc..

(3) We will also gladly co-operate with you in any other type of research work you or your students are conducting.

(4) In return for our co-operation, we would want a copy of score, percentiles, etc., for our own school records, so that we can better understand our pupils' problems and maybe do a better job of guiding them in the right direction.

We also ask you to pass this proposal on to the other graduate departments as we would do the same for them.

Yours truly,



WM. PATRICK WALSH
Principal

APPENDIX B

LETTER OF PERMISSION FROM ROMAN CATHOLIC SCHOOL

BOARD FOR THE BURIN PENINSULA

Roman Catholic School Board

for the
Burin Peninsula
Burin, Newfoundland

January 31, 1972

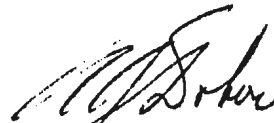
Mr. Horace Davis
Department of Curriculum & Instruction
Memorial University
St. John's
Nfld.

Dear Sir:

In reply to your letter dated January 20, 1972, this Office will gladly co-operate in the survey you, Maureen McDonald and Brian Shortall plan to do.

When details of your research project are known, I will make arrangements with the particular Schools for you.

Sincerely yours,



A. J. DOHERTY,
DISTRICT SUPERINTENDENT

AJD/jw

APPENDIX C

LETTER OF PERMISSION FROM THE BURIN PENINSULA
INTEGRATED SCHOOL BOARD

Burin Peninsula Integrated School Board

P. O. Box 15-17
Burin

Salt Pond
Newfoundland

Phone 891-1604
891-2150

April 5, 1972

Mr. Brian Shortall,
8 Laughlin Street,
St. John's, Nfld.

Dear Mr. Shortall:

I am sure our teachers will be only too happy to help you with your study. Consequently, you have our permission to send a questionnaire to our teachers during the month of May.

Best wishes for much success with your study.

Kindest regards,

Yours very truly,

Thomas Pope,
District Superintendent.

TP/el

APPENDIX D

RESEARCH BOOKLET



MEMORIAL UNIVERSITY OF NEWFOUNDLAND
St. John's, Newfoundland, Canada

Department of Curriculum and Instruction

A STUDY OF THE ATTITUDES AND TEACHING
PRACTICES OF SECONDARY SCHOOL
TEACHERS TOWARD READING
INSTRUCTION

BRIAN SHORTALL

GRADUATE STUDENT



MEMORIAL UNIVERSITY OF NEWFOUNDLAND

St. John's, Newfoundland, Canada

Department of Curriculum and Instruction

Date _____

Dear Fellow Teacher,

While on leave from my teaching position, I am completing the requirements for the degree of Master of Education in Secondary English Curriculum and Instruction. To this end, I am doing some research on reading instruction in the secondary school. My study will attempt to gather information about reading instruction in the secondary schools on the Burin Peninsula from the viewpoint of the teacher. I am surveying the attitudes and teaching practices of secondary school teachers toward reading instruction.

Today, there is increasing attention being paid to the teacher as an important cog in the educational cycle. However, there is little research data available on the teacher and the role he plays in this regard. Therefore, I am appealing to you to contribute, at the maximum, ten minutes of your time to complete the following questionnaires.

There are two questionnaires following; one is designed to determine your attitude toward reading instruction, while the other is designed to assess the extent of your use of various teaching practices. Both of these have been approved by your school board, and the findings will be used by them in planning curriculum improvements. Of course, your anonymity is guaranteed.

When you complete the questionnaires please detach the answer sheet and enclose it in the accompanying envelope.

Thank you very much for your co-operation. If you would like a copy of the results of my study please write in June to the address given on the return envelope.

Sincerely yours, *Brian Shortall**Brian Shortall*
Brian Shortall

1
Dr. O. K. Crocker
Dept. of Curriculum and Instruction
Memorial University

Dr. E. A. Jones
Consultant in English
Dept. of Education

Information Sheet

Please write the number of the category suited to you in the space provided in the column at the right.

I. Teaching Experience

1. Less than one year
2. One to two years
3. Two to three years
4. Four to ten years
5. More than ten years

II. Teaching Certificate

1. Grade One or less
2. Grade Two
3. Grade Three
4. Grade Four
5. Grade Five or higher

III. Sex

1. Female
2. Male

IV. Subject Area With Which You Are Most Familiar

1. Mathematics - Science
2. English
3. Social Studies
4. Foreign Language

V. Number of University Accredited Semester Courses in
Secondary School Reading

1. None
2. One
3. Two or more

Survey of Teacher Attitudes

The following are statements of opinion. They are generalized statements. As representations of opinion, they do not necessarily represent facts. Your agreement or disagreement will be the result of your personal experience. Please place the number of the response which first impresses you for each statement in the column at the right. Remember, because we are dealing with opinions, these can be neither right nor wrong. What you think counts -- answer according to what you believe, rather than according to what you think you should believe.

1	2	3	4	5
Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

1. Subject teachers should teach the reading and study skills of their subjects.
2. Weaknesses in student reading should be remedied through developmental reading programs.
3. Any school subject utilizing printed symbols involves reading skills.
4. Ideally, the responsibility of selecting specific goals for a reading program lies with the reading consultant and the school administrator.
5. Teachers of all high school subjects should take in-service training on how to teach reading skills relevant to their subjects.
6. A developmental reading program can provide most high school students with reading instruction adequate to their needs.
7. High schools with services of trained reading specialists should rely upon them to teach necessary reading skills.
8. Teaching reading skills interferes with the subject teacher's primary aim of developing students' knowledge of content in each school subject.

1	2	3	4	5
Strongly	Agree	Uncertain	Disagree	Strongly
Agree				Disagree

9. To accommodate students at different levels of reading ability, all teachers should present lessons and textual materials at several levels of difficulty.
10. Standardized reading survey tests should be used in diagnosis of individual student weaknesses.
11. In diagnosis of individual weaknesses in reading, standardized tests are preferable to informal methods.
12. The socioeconomic environment of a student influences his language facility in high school.
13. Content of reading material and reading purpose are factors influencing choice of reading rate.
14. Low reading achievement identifies low mental capacity.
15. The students in schools within any community tend to have similar levels of reading ability.
16. It appears to me that the majority of my students read efficiently.
17. The curricula of my school commonly require students to read to gather information and ideas.
18. I believe there are students in my school who experience failure or drop out of school because of their low reading achievement levels.
19. Increased use of audio-visual aids in my school has reduced the need for students to read.
20. It appears to me that students of my school have a need for reading instruction.
21. There appears to be wide differences among the levels of reading ability of students in my classes.

1	2	3	4	5
Strongly Agree	Agree	Uncertain	Disagree	Strongly Disagree

22. In my school, teachers of subjects other than English (or Language Arts) make an effort to improve the reading achievement of their students.
23. If I knew more about teaching reading skills, I could help my students in their learning in my subject area.

Survey of Teacher Practices

The following are statements of teaching practices. Please write the number of the response which best represents the extent to which you use the practice in the appropriate space in the column at the right.

1. Forms part of my standard teaching procedure
 2. Occasionally forms part of my planned teaching procedure
 3. Occasionally forms part of my unplanned teaching procedure
 4. Never forms part of my teaching procedure.
-
1. I categorize my students according to reading levels.
 2. I categorize the textbooks and/or reading materials I use into various reading levels.
 3. I group students in my classes according to reading ability for purposes of differentiated instruction.
 4. I provide reading materials from other sources (other texts, magazines, etc.) of varying levels of difficulty for those the textbook does not suit.
 5. I provide reading materials other than the textbook for my students.
 6. I list the major reading interests of my students.
 7. I give my students instruction and practice in locating materials in the library, encyclopedias or reference books.
 8. I give my students instruction and practice in how to use their textbooks (i.e. use of index, chapter headings, table of contents etc.).

1. Forms part of my standard teaching procedure
 2. Occasionally forms part of my planned teaching procedure
 3. Occasionally forms part of my unplanned teaching procedure
 4. Never forms part of my teaching procedure.
-
9. I give my students instruction and practice in reading at different rates of speed.
 10. I give my students instruction and practice in selecting the main ideas in what they read.
 11. I give my students instruction and practice in drawing conclusions from what they read.
 12. I give my students instruction and practice in picking out opinions and unsubstantiated generalizations in what they have read.
 13. I vary the reading assignments I give to my students in the light of their reading ability.
 14. I discuss with my students the major concepts they will encounter in a reading assignment before they begin to read it.
 15. I give my students instruction and practice in the reading skills which will be demanded of them by a reading assignment before they begin to read it.
 16. Before I give a reading assignment, I pick out new and difficult words which the students will meet, and discuss their meanings and pronunciations with the students.
 17. I list the major reading needs of my students.

1. Forms part of my standard teaching procedure
 2. Occasionally forms part of my planned teaching procedure
 3. Occasionally forms part of my unplanned teaching procedure
 4. Never forms part of my teaching procedure
-
18. I prepare my classes in the light of the reading needs, abilities and interests of my students.
 19. Through the medium of oral discussion or written answers, I find out if the students have attained the purposes they set out for in reading the assignment, and I take the appropriate steps of either rereading or proceeding to the next lesson.
 20. I team up with the other teachers who teach my students (or where no subject teaching exists, other teachers in the school) and study the curriculum so that no reading skills are overlooked or overstressed.

ANSWER SHEET

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-----FOLD HERE-----DETACH-----PLACE IN RETURN ENVELOPE-----

PRACTICES	ATTITUDES	INFORMATION
1. _____	1. _____	I. _____
2. _____	2. _____	II. _____
3. _____	3. _____	III. _____
4. _____	4. _____	IV. _____
5. _____	5. _____	V. _____
6. _____	6. _____	
7. _____	7. _____	
8. _____	8. _____	
9. _____	9. _____	
10. _____	10. _____	
11. _____	11. _____	
12. _____	12. _____	
13. _____	13. _____	
14. _____	14. _____	
15. _____	15. _____	
16. _____	16. _____	
17. _____	17. _____	
18. _____	18. _____	
19. _____	19. _____	
20. _____	20. _____	
	21. _____	
	22. _____	
	23. _____	

THANK YOU
FOR
YOUR
COOPERATION

APPENDIX E

LETTER OF PERMISSION FROM THOMAS C. DAHL

341 Empire Avenue,
Thunder Bay, Ontario,
April 11, 1972.

Mr. Brian Shortall,
8 Laughlin Crescent,
St. John's, Newfoundland.

Dear Mr. Shortall:

Please forgive the brevity of this note, but time seems to be at a premium for both of us.

Certainly, you may use my questionnaire in your study. However, if you use it in its present form without extensive modification, I must ask that you include in your thesis the stated proviso that the questionnaire may not be put to further use or published elsewhere without my written permission.

Best wishes for a successful survey. When it's done, perhaps you might communicate to me some of the results.

Please give my regards to John Harker.

Yours truly,

TCD/dd

Thomas C. Dahl

APPENDIX F

TABLE XVIII IDENTIFYING WHICH ITEMS WERE FALSE AND
POSITIVE ON ATTITUDE QUESTIONNAIRE

TABLE XVIII
DISTRIBUTION OF POSITIVE AND FALSE ITEMS IN
THE ATTITUDE QUESTIONNAIRE

Classification	Item Numbers
Positive Statements	1,3,5,6,9,12,13, 17,18,20,21,23
False Statements	2,4,7,8,10,11,14, 15,16,19,22

